

ORKNEY ISLANDS COUNCIL - HARBOUR AUTHORITY

Orkney Harbours Masterplan Phase 1

Strategic Environmental Assessment - Post Adoption Statement



DOCUMENT RELEASE FORM

Orkney Islands Council - Harbour Authority

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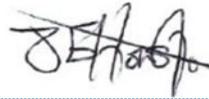
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GLOSSARY

AA

Appropriate Assessment

BWM

Ballast Water Management

CA

Competent Authority

CAR

Controlled Activities Regulations

COMAH

Control of Major Accident Hazards

ECow

Ecological Clerk of Works

EIA

Environmental Impact Assessment

EMEC

European Marine Energy Centre

EPS

European Protected Species

FRA

Flood Risk Assessment

GIS

Geographic Information System

GWDTE

Groundwater Dependent Terrestrial Ecosystems

HEPS

Historic Environment Policy for Scotland

HES

Historic Environment Scotland

HMPA

Historic Marine Protected Area

HMS

Her Majesty's Ship

HRA

Habitats Regulation Appraisal

IMO

International Maritime Organisation

JNCC

Joint Nature Conservation Committee

km

Kilometres

LNG

Liquefied Natural Gas

LPG

Liquefied Petroleum Gas

LSQ

Local Specific Qualities

LSE

Likely Significant Effect

m

Metres

mm

Millimetres

MOD

Ministry of Defence

MPA

Marine Protected Areas

MS-LOT

Marine Scotland Licensing Operations Team

NNS

Non-native species

NMP

National Marine Plan

NSA

National Scenic Area

NVC

National Vegetation Classification

OBRC

Orkney Biodiversity Records Centre

OHBS

Orkney Historical Boat Society

OIC

Orkney Islands Council

OICHA

Orkney Islands Council Harbour Authority

OITS

Orkney Inter Isles Transport Study

OLDP

Orkney Local Development Plan

PPS

Plan, Programme or Strategy

PMF

Priority Marine Feature

pSPA

Proposed Special Protection Area

RBMP

River Basement Management Planning

RET

Road Equivalent Tariff

RSPB

Royal Society for the Protection of Birds

RYA

Royal Yachting Association

SAC

Special Area of Conservation

SEA

Strategic Environmental Assessment

SEPA

Scottish Environment Protection Agency

SHEP

Scottish Historic Environment Policy

SMRU

Sea Mammal Research Unit

SNH

Scottish Natural Heritage

SPA

Special Protection Area

SPP

Scottish Planning Policy

SSF

Scottish Sea Farms

STS

Ship-to-Ship

UK

United Kingdom

UKMCC

United Kingdom Maritime Component Command

WFD

Water Framework Directive

XR

Extinction Rebellion

1. INTRODUCTION

This SEA Post Adoption Statement has been prepared on behalf of Orkney Islands Council Harbour Authority (OICHA) to comply with Section 18 of the Environmental Assessment (Scotland) Act 2005 and as part of the Strategic Environmental Assessment (SEA) of Orkney Harbours Masterplan Phase 1.

This document provides a summary of the responses received from consultation on the draft Orkney Harbours Masterplan Phase 1 and Environmental Report; consulted on during Summer 2019. The document explains:

- The reasons for adopting the Final Masterplan;
- How the key findings from the SEA and responses from consultations have been taken into account in the preparation of the final Masterplan;
- Details how environmental considerations have been integrated; and
- Identifies proposals for monitoring the implementation of the Masterplan.

1.1 Consultation

As part of the consultation public meetings were held to present the Draft Masterplan and 'drop-in' sessions held to enable members of the public to view the Draft Masterplan and accompanying SEA Environmental Report, ask questions and make comment.

The Draft Masterplan and Environmental Report were also available online and in hard copy for a period of six weeks between 10th June and 22nd July 2019.

A separate consultation report has been prepared – Orkney Harbours Masterplan Phase 1 (Fishers Advisory Ltd, 2020). The report provides an overview of the stakeholder engagement and participation activities carried out during the development of the Masterplan and covers:

- Consultation strategy.
- Stakeholder engagement – summary.
- Addressing community consultation comments.

2. STRATEGIC ENVIRONMENTAL ASSESSMENT PROCESS

Orkney Harbours Masterplan Phase 1 has been subjected to a process of Strategic Environmental Assessment (SEA), as required under the Environmental Assessment (Scotland) Act 2005. This has included the following activities:

- Taking into account the views of the Scottish Environment Protection Agency (SEPA), Scottish Natural Heritage (SNH) and the Scottish Ministers (Historic Environment Scotland (HES)) regarding the scope and level of detail that was appropriate for the Environmental Report.
- Preparing an Environmental Report on the likely significant effects on the environment of the draft Plan, Programme or Strategy (PPS) which included consideration of:
 - The baseline data relating to the current state of the environment;
 - Links between the PPS and other relevant strategies, policies, plans, programmes and environmental protection objectives;
 - Existing environmental problems affecting the PPS;
 - The plan's likely significant effects on the environment (positive and negative);
 - Measures envisaged for the prevention, reduction and offsetting of any significant adverse effects;
 - An outline of the reasons for selecting the alternatives chosen, and
 - Monitoring measures to ensure that any unforeseen environmental effects will be identified, allowing for appropriate remedial action to be taken.
- Consulting on the Environmental Report
- Taking into account the Environmental Report and the results of consultation in making final decisions regarding the PPS
- Committing to monitoring any potential significant environmental effects of the implementation of the PPS. This will also identify any unforeseen adverse significant environmental effects and to enable taking appropriate remedial action.

3. REASONS FOR CHOOSING THE MASTERPLAN IN LIGHT OF OTHER REASONABLE ALTERNATIVES

3.1 Alternatives Considered

An initial long list of Masterplan development options was derived from stakeholder discussion and workshops, internal discussions with OICHA and staff, market assessment and desk-based research and review. A number of these options were screened out of further environmental assessment, as they did not meet the objectives of the Orkney Harbours Masterplan or were not feasible.

All options, included in the initial long list of potential options, were considered to have the potential to result in a negative impact on the environment. Any option included within the Orkney Harbours Masterplan will have some impact on the environment to varying extents, therefore environmental appraisal of the options was not considered in the initial shortlisting phase. Based on this, a high-level assessment to select the preferred options mainly focused on their technical appraisal. Many of the options rejected initially were either technically not viable or did not deliver against the Orkney Harbours Masterplan’s outline requirements and/or objectives. The options (hereafter referred to as proposals) that were taken forward to the environmental assessment within the Environmental Report are listed in Table 3-1.

Table 3-1 Masterplan Options Assessed within the SEA Environmental Report

Location	Proposals
Kirkwall Pier	<ul style="list-style-type: none"> ▪ New multi-purpose quayside infrastructure ▪ Waterfront development and marina expansion (through reclamation) ▪ Improving quayside layout and traffic management ▪ Improvements to fish landing areas ▪ Dredging to provide deeper water
Hatston	<ul style="list-style-type: none"> ▪ New multi-purpose deep water quayside infrastructure ▪ Reclamation and land available for development ▪ Reconfiguration of marshalling areas and access routes ▪ Refurbished passenger reception facility
Lyness	<ul style="list-style-type: none"> ▪ Create new hard standing to be used as a storage area
Scapa Pier	<ul style="list-style-type: none"> ▪ Pier extension and dredging to provide deeper water ▪ Marine leisure slipway/pontoons
Stromness & Copland’s Dock	<ul style="list-style-type: none"> ▪ Improvements to Copland’s Dock (filling in between fenders) ▪ Reclamation to create additional development area ▪ Marina expansion
Scapa Deep Water Quay	<ul style="list-style-type: none"> ▪ New deep-water quayside infrastructure ▪ 5+ hectares of laydown area

3.2 Summary of Findings for the Adopted Masterplan

The assessment of Kirkwall Pier, Hatston, Scapa Pier, Stromness & Copland's Dock and Scapa Deep Water Quay Masterplan proposals is presented in the final SEA Environmental Report (Intertek, 2019a). At the time of writing the Environmental Report Lyness was excluded from the assessment as originally no development at Lyness was considered. However, this was later revised and a proposal for creating a hardstanding area was included in the Orkney Harbours Masterplan as a longer-term proposal.

Assessment of the likely significant environmental effects of the above selected proposals concluded that there is the potential for negative effects on the SEA topics of air, biodiversity, flora and fauna, climatic factors, cultural heritage, landscape, material assets, population and human health, soils and water from implementation of the Orkney Harbours Masterplan. These potential impacts are mainly resulting from activities during the construction phase. Potential impacts on the SEA topics are summarised below:

- **Air:** Negative effects on air include increased emissions and dust (during construction); change to local air quality; and additional traffic (sea and road) following implementation of the developments could lead to higher future emissions during the operation phase.
- **Biodiversity, Flora and Fauna:** Negative effects on biodiversity, flora and fauna may include underwater noise and visual impacts resulting in disturbance of birds and marine mammals; direct habitat loss and disturbance; effects on designated sites (indirectly through vessel movements or disturbance or loss of habitats and species during construction and operation); and the potential introduction and spread of invasive non-native species (NNS). All the Masterplan proposals are located with a Proposed Special Protection Area (pSPA). Kirkwall and Hatston are located within the North Orkney pSPA and Scapa Pier, Stromness and Scapa Deep Water Quay are located with the Scapa Flow pSPA.
- **Climatic Factors:** Negative effects on climatic factors include increase in Green House Gas and carbon footprint during construction and operation.
- **Cultural Heritage:** Potential negative effects on cultural heritage include disturbance of archaeology during construction; and long-term effects due to change in the cultural setting.
- **Landscape:** Potential negative effects on landscape include changes to landscape character; effects on national scenic area; and general deterioration of visual amenity / seascape.
- **Material Assets:** Negative effects on material assets could arise due to an increase in waste due to dredging and additional vessels visiting the harbour and piers.
- **Population and Human Health:** Negative effects on human health and population include effects on the safety of harbour users as introduction of new structures presented physical barriers affecting navigation. This could lead to an increase in accidents. In addition, increased vessel movements due to additional traffic could lead to an increase in accidents and incidents. There could also be health effects from increased dust and emissions and disturbance and nuisance impacts from construction and increased shipping traffic. Benefits include sustainable use of material assets through the enhancement of existing port facilities. The development and enhancement of facilities could lead to employment opportunities (both during construction and operation), the success or failure of port developments could lead to an increase or decrease in commercial activity.
- **Soils:** Negative effects on soils include introduction of new sources of pollution, erosion of coastline due to changes in wave climate and effects on soil function and land use changes.
- **Water:** Negative effects on water include degradation of water quality due to short term mobilisation of contaminated sediments and turbidity impacts; hydrodynamic changes due to

changes to the shoreline and dredging; and follow on morphological changes, though these are expected to be minor. In addition, degradation of water quality through accidental release of fuel or vessel containment.

3.2.1 Cumulative and Synergistic effects

Cumulative and synergistic effects were also considered. Cumulative effects could arise from the combined effects of the development of the Orkney Harbours Masterplans proposals and other plans and activities within the area. Synergistic effects could arise from interactions between activities leading to a greater overall effect than the sum of the individual effects. Activities and developments that were considered included marine renewable developments, other port and harbour developments, cable installations and general shipping.

The assessment found the following:

- The simultaneous construction of several proposals identified in the Orkney Harbours Masterplan is likely to lead to the greatest cumulative negative effects on the wider environment.
- Development of the Orkney Harbours Masterplan proposals and other projects could lead to cumulative negative effects on air, biodiversity, flora and fauna, climatic factors, material assets, population and human health, soils and water.
- It is likely that good planning and timing of works will minimise the potential for negative cumulative and in-combination effects.

There is inevitably uncertainty in predicting cumulative and synergistic effects and determining their significance due to the strategic nature of the study and the current lack of detailed proposal plans and timelines. In addition, uncertainty can arise due to the variation in natural systems and their interactions, a lack of reliable and up to date information, sufficient scientific agreement regarding cause-effect relationships and the inability to adequately understand and represent complex systems and the potential implications of cumulative and synergistic effects on these systems.

3.3 HRA Assessment Findings

Intertek carried out a Habitats Regulation Appraisal (HRA) screening of the Orkney Harbours Masterplan in June/July 2019. The assessment concluded that eight Natura 2000 sites should be subjected to an Appropriate Assessment (AA) as there was a potential for Likely Significant Effects (LSE) (Intertek, 2019b).

SNH, in its capacity as an advisory body, reviewed the findings of this HRA screening and agreed with the screening assessment's conclusion.

AA is the second stage of the HRA process, whereby the first stage (or screening process) has either determined the plan or project, alone or in-combination with other plans or projects, is likely to have a significant effect on a Nature 2000 site, or if it cannot be excluded, on the basis of objective information, that the proposed plan or project, individually or in combination with other plans or projects, will have a significant effect on a European site.

Intertek carried out an AA, the second stage of the HRA process, in December 2019/January 2020 (Intertek, 2020). The Assessment concluded that the implementation of the Orkney Harbours Masterplan will not have any adverse effects on the integrity of Special Protection Areas (SPAs) and proposed Special Protection Areas (pSPAs) and draft SPAs in the area during the site investigation and operation phases but that there may be adverse effects during the construction of the proposals. The site investigation and construction phases may have adverse effects on the integrity of Special Areas of Conservation (SACs) through underwater noise changes. The operation phases of the Masterplan proposals will not impact SACs.

The assessment concluded that the implementation of the Orkney Harbours Masterplan may lead to adverse effects on the integrity of SACs, SPAs, pSPAs and draft SPAs in the area for the following pressures, sites and designated features:

Underwater noise changes – site investigation and construction phases

- Faray and Holm of Faray SAC: Grey seal
- Sanday SAC: Harbour seal

Visual disturbance - construction phase

- Hoy SPA: Peregrine falcon (breeding), Red-throated diver (breeding)
- North Orkney pSPA: Red-throated diver (breeding), Common eider (non-breeding) European shag (non-breeding), Great northern diver (non-breeding), Long-tailed duck (non-breeding), Red-breasted merganser (non-breeding), Slavonian grebe (non-breeding), Velvet scoter (non-breeding)
- Orkney Mainland Moors SPA: Hen Harrier (breeding), Hen Harrier (non-breeding), Red-throated diver (breeding)
- Orkney Inshore Waters Draft SPA: Black-throated diver (non-breeding), Common eider (non-breeding), Common goldeneye (non-breeding), Great northern diver (non-breeding), Long-tailed duck (non-breeding), Red-breasted merganser (non-breeding), Red-throated diver (breeding), European shag (non-breeding), Slavonian grebe (non-breeding), Velvet scoter (non-breeding)
- Scapa Flow pSPA: Great northern diver (non-breeding), Red-throated diver (breeding), Black-throated diver (non-breeding), Slavonian grebe (non-breeding), Common eider (non-breeding), European shag (non-breeding), Red-breasted merganser (non-breeding), Long-tailed duck (non-breeding), Common goldeneye (non-breeding)

Changes to prey availability - construction phase

- North Orkney pSPA: Red-throated diver (breeding)
- Orkney Inshore Waters draft SPA: Red-throated diver (breeding)
- Scapa Flow pSPA: Red-throated diver (breeding)

Mitigation measures are recommended to mitigate the potential for adverse effects on the integrity of sites from the implementation of the Masterplan. This includes seasonal restrictions for developments to avoid sensitive periods for bird species and implementation of guidelines and procedures to minimise the impact of underwater noise on seals.

However, given the uncertainties around the final project details (design and construction methodologies) in the plan level assessment, taking a precautionary approach, the conclusion of any adverse effect on site integrity was deferred to project level HRA. The AA recommended that at the project stage additional information, including bird survey data, should be gathered in order to collate sufficient information to make a conclusion. Furthermore, at project level, more detailed mitigation will be proposed if necessary, to avoid or minimise adverse effects.

4. INCORPORATING THE FINDINGS FROM THE SEA INTO THE MASTERPLAN

This section provides an overview of how the findings from the Environmental Report were used to inform the preparation of the final Orkney Harbours Masterplan Phase 1.

4.1 How Environmental Considerations have been integrated into the Masterplan

Table 4-1 lists the environmental considerations and problems in the area and demonstrates how these have been taken into account in the Final Plan. Where these have not been taken into account, reasons for this are included.

Table 4-1 Environmental considerations and how they were taken into account

Environmental considerations and findings from the Environmental Report	Integrated / taken into account in the Masterplan (YES/NO)	How integrated/taken into account or reason for not being taken into account
Deterioration of seabird populations. Current status of breeding seabird populations shows many concerns with a predicted deterioration of trends.	Yes	The Orkney Harbours Masterplan seeks to not adversely affect seabird habitats, protected sites and disrupt seabird populations. This will be achieved through careful planning of the construction phases. An HRA has been undertaken for the Masterplan and project level HRA will enable further consideration of seabirds.
Effects on non-designated but important habitats and species such as those identified for protection under proposed Marine Protected Areas (MPAs) and Annex I Habitats (including potential habitats). Habitats and species identified as requiring further protection.	No	MPAs and Annex I Habitats will not be adversely affected by the implementation of the Masterplan.
Effects on European Protected Species (EPS) (otter and cetaceans) through underwater sound changes during construction and operations.	Yes	The Masterplan seeks to minimise impacts on EPS through detailed design and consideration during construction and operations. An HRA has been undertaken for the Masterplan and project level EIA and HRA will enable further consideration of underwater sound changes on EPS.
Deterioration of harbour seal populations, in Orkney and North Scotland.	Yes	The Masterplan seeks to protect harbour seal and ensure that their population and activities such as foraging is not adversely impacted. An HRA has been undertaken for the Masterplan and project level HRA will enable further consideration of harbour seals.

Environmental considerations and findings from the Environmental Report	Integrated / taken into account in the Masterplan (YES/NO)	How integrated/taken into account or reason for not being taken into account
Effects of dredging on habitats and species.	Yes	The Masterplan will seek to develop a suitable dredging mitigation strategy to ensure potential impacts are minimised. In addition the Masterplan will seek to ensure dredging activities are timed so that they do not disturb migrating fish and foraging birds. Disposal of dredge spoil will be carried out in licensed areas where it would not impact negatively upon vulnerable marine habitats.
Introductions of invasive NNS.	Yes	The Masterplan seeks to ensure introduction of NNS are avoided through management and mitigation measures, such as cleaning of equipment and plant machinery with management practices to prevent the spread of invasive species. Ongoing monitoring is included to ensure any introductions are recorded and appropriate guidance followed.
Seabed damage, such as that caused by anchors and moorings.	Yes	The Masterplan proposals have been designed to ensure that seabed disturbance is kept to a minimum.
Pollution from shipping	Yes	The Masterplan seeks to prevent pollution of the seas from chemicals and oil during construction and operation. The masterplan includes planning and management of construction activities and requires preparation of emergency response plans and accident prevention procedures.
Agricultural runoff	Yes	The design and siting of the Masterplan proposals seeks to prevent any additional pollution to sea from agricultural runoff.
Marine litter is a persistent and widespread problem on Orkney's shorelines.	Yes	The Masterplan seeks to avoid marine littering during construction and operation.
Degradation of water quality due to short term mobilisation of contaminated sediments and turbidity impacts; hydrodynamic changes due to changes to the shoreline and dredging; and follow on morphological changes.	Yes	The Masterplan will seek to develop a suitable dredging mitigation strategy to ensure potential impacts are minimised. In addition proposals will be designed to ensure changes to hydrodynamics and morphological changes are minimised. For all marine pier works rock bunds will be constructed, with geotextile and rock armour facing ahead of main reclamation infill works, this will contain any containment sediments and prevent migration of sediments. Contaminated seabed sediments will be disposed of appropriately.

Environmental considerations and findings from the Environmental Report	Integrated / taken into account in the Masterplan (YES/NO)	How integrated/taken into account or reason for not being taken into account
High carbon emissions from harbour fleet and ferries.	Yes	The Masterplan will monitor and help to deliver reduced emissions by promoting low carbon alternatives, so that ongoing shipping activity does not lead to a reduction in air quality. Hydrogen and locally produced electricity are being used to power ferries in Orkney and the Masterplan aims to support transition from fossil fuels to lower carbon and eventually carbon-free alternatives.
Orkney has a relatively high carbon footprint.	Yes	The Masterplan seeks to support the growth of communities in a sustainable manner and the proposals are designed to be energy efficient and consider the sustainable use of building materials, incorporation of renewable energy technologies into new developments. In addition, the Masterplan includes a number of measures to assist with decarbonisation.
A number of areas in Orkney are at increased risk of flooding due to climate change sea level rise.	Yes	The Masterplan proposals include coastal defence to ensure risk of flooding is controlled, all proposals are designed to accommodate expected sea level rise for the Orkney Islands. As each proposal is taken forward the development will be subject to a detailed Flood Risk Assessment (FRA) at the planning phase.
A number of locations are at increased risk of coastal erosion due to combination of rising sea levels and increased storminess.	Yes	The Masterplan proposals include coastal defence measures to ensure coastal erosion is controlled.
Growing trend in waste produced.	Yes	The Masterplan seeks to ensure waste is minimised during construction and operation. The waste management plan will be reviewed in light of the Masterplan.
Sources of construction (e.g. sand and aggregates) for extensions to existing piers, construction of new facilities and any new access roads.	Yes	The Masterplan seeks to re-use as much materials as possible, this may be dredged materials from other proposal sites. Other materials will be sought from local sources wherever possible.
Potential effect of identified contaminated land.	Yes	<p>The Masterplan has taken contaminated land issues into consideration when proposing new land allocations. Lyness is a brownfield site and contaminated land issues will be considered in detail in the construction of the proposal.</p> <p>For all marine pier works rock bunds will be constructed, with geotextile and rock armour facing ahead of main reclamation infill works, this will contain any containment sediments and prevent migration of sediments. Contaminated seabed sediments will be disposed of appropriately.</p>

Environmental considerations and findings from the Environmental Report	Integrated / taken into account in the Masterplan (YES/NO)	How integrated/taken into account or reason for not being taken into account
Requirement to protect and enhance the quality and distinctiveness of Orkney's landscapes and townscapes.	Yes	The Masterplans proposals encourage the appropriate siting, design and scale of development in relation to the surrounding landscape, including nationally or locally designated landscape areas. Sensitive design and planning will minimise impacts.
Orkney's rich cultural heritage is displayed in its many archaeological sites and historic buildings. Development can result in the loss of or damage to, historic environment features or may affect their setting.	Yes	The Masterplan seek to maintain and where appropriate enhance Orkneys high quality cultural heritage.
Ageing population – decline in proportion of population which is economically active.	Yes	The developments proposed by the Orkney Harbours Masterplan seek to support economic development and employment within the Orkney Islands.
Disturbance and nuisance impacts from construction and operation on local communities.	Yes	The Masterplan seeks to ensure disturbances are kept to a minimum through implementation of good working practices, planning and timing. Noise-producing activities such as piling will only take place during daylight hours and these activities will be monitored.

4.2 How the Environmental Report has been taken into Account

The SEA informed the preparation of the final Orkney Harbours Masterplan Phase 1 in a number of ways:

- Providing a transparent means of identifying, describing, evaluating and reporting environmental effects,
- Incorporating input from consultation activities,
- Develop approaches to prevent, reduce and offset negative environmental effects, and
- Develop approaches to enhance positive effects.

4.2.1 Changes made to the Masterplan

Throughout the progression of the SEA and the HRA the Orkney Harbours Masterplan was changed in the following ways:

- One of the Masterplan objectives is “To safeguard and support the long-term productivity of the coastal and marine environment through best practice and strong environmental stewardship”, the SEA has helped to deliver this objective.
- It was identified early on in the SEA process that any option considered for development within the masterplan would have the potential to result in a negative impact on the environment to varying extents. Therefore, the SEA allowed selected options to be assessed against a set of SEA objectives and potential negative effects of each identified.

- The mitigation measures suggested within the SEA and HRA have become part of the Masterplan and are presented as an Appendix within the plan itself. These will be further developed during the Environmental Impact Assessment (EIA) at project level and through detailed planning and design – when the specifics of the developments can be optimised through detailed feasibility studies and design in order to limit the potential impacts on sensitive receptors.
- The HRA assessed the potential for negative cumulative impacts or inter-relationships with other schemes, plans or projects, these have fed into the Masterplan and will include timings of construction works to minimise and avoid sensitive time periods for designated species.
- A key part of the Masterplan has been enhancing the environment, therefore many of the masterplan proposals have the potential to have a positive impact on the local environment, townscape and visual amenity, through sensitive design, improvements to layouts, traffic flows and removing conflict between different operational activities.
- The SEA and HRA identified the benefits of sensitive lighting schemes on the environment and these will be implemented during construction and operation of the proposals.
- The implementation of the Masterplan proposals themselves will lead to additional opportunities to enhance the environment, such as through the creation of green infrastructure; this might include landscaped features positioned to aid vehicular or pedestrian traffic management; or planting to make particular spaces more attractive.
- Following construction there will be opportunities for landscaping, re-vegetation and habitat enhancement which would be undertaken in line with appropriate guidance to maximise benefit for biodiversity.

4.2.2 Mitigation Measures

During the SEA potential negative impacts were identified on air, biodiversity, flora and fauna, climatic factors, cultural heritage, landscape, material assets, population and human health, soils and water from implementation of the Orkney Harbours Masterplan. These potential impacts are mainly resulting from activities during the construction phase. Good planning and selection of mitigation measures and implementation of them will mitigate many of these potential negative effects.

Detailed mitigation measures will be selected during the EIA process at a project level and through detailed planning and design – when the specifics of the developments can be optimised through detailed feasibility studies and design in order to limit the potential impacts on sensitive receptors.

The timing of construction works should be planned to avoid any potential for negative cumulative impacts or inter-relationships with other schemes, plans or projects.

Table 4-2 presents initial consideration of potential mitigation measures identified in the Environmental Report that could be implemented, should one or more of the proposals within the Orkney Harbours Masterplan be taken forward for development. At the EIA stage engineering designs will be finalised and the mitigation measures refined. All works and planning of works should be undertaken with respect to all relevant legislation, licencing and consent requirements and recommended best practice.

Table 4-2 Mitigation Measures

Issue / Impact Identified	Mitigation Measure	Lead Authority	Proposed Timescale
Localised short-term effects of dust due to construction work.	Construction sites will be damped down in periods of dry weather.	Contractor	During the construction phase.
Localised short-term effects of dust due to construction work.	All equipment to be used will be subject to regular audits to ensure compliance. Good operating practices and maintenance programmes of all equipment to be used.	Orkney Islands Council (OIC) Contractor	During the construction phase
Works involving excavation and soil disturbance cause physical damage to and loss of habitats and, if active remediation is not carried out, these habitats may not return to their former condition. Construction of Scapa Deep Water Quay would lead to damage to and loss of habitat in Gaitnip Hill Local Nature Conservation.	Design / implementation of schemes should minimise disturbance to biodiversity as well as wildlife protection measures. Development of a Construction Environmental Management Plan at project level, detailing how impacts on biodiversity, flora and fauna should be avoided / mitigated. Where there is uncertainty concerning the appropriate method to be used, advice should be sought from the relevant regulator. Appointment of Ecological Clerk of Works (ECoW) for each construction project.	OIC	During the design optimisation
Impacts to EPS (otter and cetaceans) through underwater sound changes during construction and operations.	Surveys could be undertaken to determine EPS and basking sharks presence in areas where development is proposed.	OIC	During EIA
	Where necessary application made for EPS licence to disturb EPS.	OIC	During EIA
	Where works may generate loud underwater noise (e.g. blasting or pile driving), a marine mammal observer should be present. Pre-search will be done prior to commencing the work to ensure no cetaceans or otter are within 500m of the operations for a 30 minutes duration. If no cetaceans / otters are sighted, a soft-start procedure will be followed. Appointment of ECoW for each construction project.	OIC	During construction

Issue / Impact Identified	Mitigation Measure	Lead Authority	Proposed Timescale
Disturbance to birds during construction.	<p>Bird surveys of the areas should be commissioned.</p> <p>Consideration should be given to seasonal restrictions to avoid periods when birds are present in the Scapa Flow pSPA and North Orkney pSPA.</p> <p>Construction works could be undertaken during less sensitive periods.</p> <p>Appointment of ECoW for each construction project.</p>	OIC	During the construction
Disturbance to birds during operation.	<p>Consideration will be given to limit vessel speed.</p> <p>Consultation with key parties to identify embedded mitigation measures.</p>	OIC	Ongoing
Impacts of dredging on flora and fauna.	<p>Surveys (ecological and environmental baseline) should be commissioned where necessary.</p> <p>Implementation of dredging mitigation strategy and implementation of good practices.</p> <p>Dredging activities should be timed so as to not disturb migrating fish and nesting birds.</p> <p>Consultation with SNH on methodology and appropriate timing to cause least damage, habitat loss and sedimentation.</p>	OIC	During the design optimisation / EIA
Habitat disturbance and loss due to shoreline reclamation.	<p>Habitat survey of the areas should be commissioned.</p>	OIC	During EIA
	<p>After construction landscaping, revegetation and habitat enhancement should be undertaken in line with appropriate guidelines.</p> <p>Appointment of ECoW for each construction project.</p>	Contractor	During the construction
Impacts on conservation objectives of designated sites (e.g. pSPA) from construction and operations.	<p>Undertaking an HRA of each development.</p> <p>Good planning and timing of works and good construction and management practices to keep impacts to a minimum.</p> <p>Appointment of ECoW for each construction project.</p>	OIC	Ongoing
Introduction of invasive species during construction and operations.	<p>Implementation of Ballast Water Management Plan and industry standard ballast water management practices.</p>	OIC	Ongoing
	<p>Cleaning of equipment and plant machinery with management practices to prevent the spread of invasive species.</p>	Contractor	During the construction

Issue / Impact Identified	Mitigation Measure	Lead Authority	Proposed Timescale
Construction can result in the loss of or damage to, historic environment features or may affect their setting.	Orkney Local Development Plan Policy 8 Historic Environment and Culture Heritage will seek to insure that effects on the historic environment are managed in a sensitive manner.	OIC	During the design optimisation
Possible presence of undiscovered archaeology.	Undertake an archaeological survey.	OIC	During EIA
Construction of new infrastructure resulting in damage to, or loss of, cultural heritage, including the maritime heritage.	Orkney Local Development Plan Policy 8 Historic Environment and Culture Heritage will seek to insure that effects on the historic environment are managed in a sensitive manner. Any cultural features identified in the EIA and planning phase should be feed into the detailed design.	OIC	During the design optimisation
	If archaeological features are identified construction should be supervised by a qualified archaeologist and combined with sensitive construction methods and restoration to minimise potential damages.	Contractor	During the construction
Changes to cultural setting due to presence of new infrastructure (e.g. impacts on conservation areas).	Impacts kept to a minimum through sensitive design and planning.	OIC	During the design optimisation
Construction of new infrastructure may potentially cause negative impact on landscape during construction.	Orkney Local Development Plan Policy 8 Historic Environment and Culture Heritage will seek to insure that effects on the historic environment are managed in a sensitive manner.	OIC	During the design optimisation
	Impacts kept to minimum through good site practice and planning and adoption of Construction Best Practice.	Contractor	During the construction
Negative impacts on landscape during operational phases.	Impacts kept to a minimum through sensitive design and planning.	OIC	Ongoing
	Undertake landscape and visual assessment.	OIC	During EIA
Extensions to existing piers, construction of new facilities and any new access roads would require use of non-renewable resources (e.g. sand and aggregates).	Where possible, rock and aggregate for any construction work should be sourced locally. Where possible the use of secondary aggregate will be considered. It is also anticipated that a proportion of dredged materials could be re-used for developments.	OIC	During the construction

Issue / Impact Identified	Mitigation Measure	Lead Authority	Proposed Timescale
Disturbance of local infrastructure during construction (e.g. shops and amenity areas).	Good site management, traffic and construction management plans and public consultation will enable impacts to be kept to a minimum. Adoption of Construction Best Practice.	Contractor	During the construction
Uncertainty over potential vessel collisions with new piers/extended piers.	Undertake navigational risk assessments.	OIC	During the design optimisation
Increase in waste generation.	Waste management plan should be reviewed in light of the Orkney Harbours Masterplan to assess how best to accommodate additional predicted waste.	OIC	Ongoing
Uncertainty over potential road safety.	Undertake road traffic assessments.	OIC	During the design optimisation
Health and safety risks due to presence of new infrastructure.	Good construction management practices and adoption of Construction Best Practice. Recording of all incidents.	OIC/Contractor	Ongoing
Disturbance and nuisance impacts from construction and operation on local communities.	Disturbances should be kept to a minimum through implementation of good working practices, planning and timing. Noise-producing activities such as piling should only take place during daylight hours and monitoring of these activities should occur. Adoption of Construction Best Practice. Continued liaison with local communities regarding air, noise and vibration emissions resulting from construction and operations.	OIC	During the construction and ongoing maintenance.
Construction of new access roads would require land take and lead to land use changes and loss of soils.	Land take should be kept to a minimum.	OIC	During the design optimisation
Removal of seabed sediments from dredging.	Re-use of dredged materials where possible (e.g. for shoreline reclamation).	OIC	During the design optimisation and construction.
Contamination of sediments.	Good management and planning to minimise contamination. Development and implementation of environmental management plan prior to construction.	OIC	Ongoing

Issue / Impact Identified	Mitigation Measure	Lead Authority	Proposed Timescale
Disturbance to and loss of peat.	Good construction practices to minimise damage and loss of sensitive soils and habitat.	OIC	During the design optimisation and construction.
Drainage of surface water from roads and other developed areas.	The inclusion of sustainable drainage systems should be considered at the planning stage of the new developments.	OIC	During the design optimisation
Construction or maintenance dredging has the potential to result in increased suspended solids in water column and impact hydrodynamics.	Development of a dredging mitigation strategy to ensure potential impacts from sediment re-suspension and distribution of contaminated sediments minimised. Designs should aim to ensure that Water Framework Directive (WFD) objectives are not compromised. Undertake WFD Assessment for all developments.	OIC	During the design optimisation
	Completion of all relevant licensing and permitting for dredging activities. Timings of dredging to be planned appropriately.	OIC	During the construction and ongoing maintenance.
Temporary disturbance of water quality during construction.	Ensuring good management and planning should keep water quality impacts to a minimum. Using Best Available Techniques / Technologies at all times.	Contractor	During the construction
Potential for pollution incidents during construction and operation.	Strict planning and management of construction activities. Preparation of emergency response plans and accident prevention procedures. Good working practices including; silt traps, hydrocarbon interceptors, appropriate storage of fuel, oils and chemicals, provision of spill kits and plant washing facilities.	OIC	During the construction and ongoing maintenance.
	Identification of historically contaminated areas.	OIC	During the design optimisation
Potential for flood risk.	Each development should be subject to a detailed Flood Risk Assessment at the planning phase.	OIC	During the design optimisation
Potential for alterations to coastal processes.	Detailed surveys and hydrodynamic modelling should be undertaken to inform design to ensure there are no negative impacts on coastal processes.	OIC	During the design optimisation

Issue / Impact Identified	Mitigation Measure	Lead Authority	Proposed Timescale
Dredging required around certain piers in order to accommodate larger vessels impacting flora and fauna.	Disposal of dredge spoil should be carried out in licensed areas where it would not impact negatively upon vulnerable marine habitats or the activities of other users of the sea.	OIC	During the construction and ongoing maintenance.

5. HOW CONSULTEES VIEWS HAVE BEEN TAKEN INTO ACCOUNT WITHIN THE FINALISED MASTERPLAN

This section provides an overview of how the consultee views have been taken into account within the preparation of the final Orkney Harbours Masterplan Phase 1.

Table 5-1 lists all consultation responses received on the SEA Environmental Report and Orkney Harbours Masterplan Phase 1. Where appropriate, the comments raised have been taken into account in the preparation of the final Orkney Harbours Masterplan Phase 1. When these have not been taken into account reasons for this are identified.

Table 5-1 Consultation comments and description of how they have been taken into account

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
Royal Society for the Protection of Birds (RSPB)	<p>Climate change: RSPB feel the proposals conflict with climate change ambitions as they seem to predominantly focus on and prioritise provisioning the oil and gas industry in the short to long term by developing shoreside facilities to support and grow this sector.</p> <p>In light of the First Minister and OIC declaring a ‘climate emergency’ it must be clearly demonstrated how any proposals that come forward are compatible with Scotland’s carbon reduction targets – including the commitment to achieve net zero greenhouse gas emissions by 2045.</p>	Noted. The masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
RSPB	<p>Protected Areas: RSPB agree with the content of Section 5 (Environmental Considerations), the potential impacts on the Scapa Flow and North Orkney pSPAs and need for thorough assessment through an Appropriate Assessment should be highlighted.</p>	Noted. An AA has been carried out for the plan and will be revised as part of the work carried out for each proposal to allow for more detailed assessment at the project level.
RSPB	<p>RSPB Scotland continues to have concerns regarding ship to ship transfers within Scapa Flow. 2018 has seen the highest number of transfers and volumes recorded since operations began – 66 operations involving the transfer of 4.8 million tonnes of oil. The Masterplan states that this is expected to continue and will encourage more.</p>	Noted. It is worth noting that there are already a substantial number of vessel movements to and from Scapa Pier servicing ship-to-ship (STS), Flotta and rigs at anchor; it should also be noted that movements of larger vessels are now significantly lower in Scapa Flow than in previous years.
RSPB	<p>Cruise ships: OIC will need to ensure that onshore infrastructure is sufficient for increased cruise ships and that the impacts of increased footfall at the most popular tourist sites (which include natural heritage sites) are mitigated.</p>	<p>The masterplan does not support or promote a major increase in the number of cruise calls and passengers – rather the focus is on reducing the conflicts between cruise and other harbour-related activity. Enhancements at Kirkwall Pier could enable more smaller cruise ships to call alongside though it is envisaged that there would only be a marginal overall increase in passenger numbers.</p> <p>There is currently a joined approach to addressing these issues through joint working between the Destination Orkney Strategic Partnership, Orkney Harbours and wider Council departments.</p>
RSPB	<p>Biosecurity and non-native species: We would like to see more information provided about how ballast water exchange will be dealt with. We would like to see OIC’s Ballast Water Management (BWM) Policy updated and strengthened alongside this Masterplan.</p> <p>Given the aspiration for increased vessel traffic we would like to see more information on how effective biosecurity measures will be introduced to ensure non-native species are not inadvertently transported between islands.</p>	<p>Noted. These aspects will be addressed at feasibility stage/through the completion of a detailed Environmental Impact Assessment (EIA) for each proposal.</p> <p>The OIC BWM Policy is compliant and exceeds the requires of the International Maritime Organisation (IMO) Convention and therefore is currently fit for purpose.</p>
Scottish Water	<p>Scottish Water supports the creation of a structured framework that sets out the physical development of Orkney’s harbours over the next few decades.</p>	Noted.

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
Scottish Water	<p>Scottish Water Strategic Capacity: In addition to associated domestic water and drainage requirements, several of the business opportunities identified in the Masterplan, such as water bunkering, hydrogen production, certain aquaculture activities etc. can be very water intensive. Furthermore, some activities, like fish processing, will also have a trade effluent discharge. In the locations identified, these demands may well be in excess of what is currently available.</p>	Noted.
Scottish Water	<p>Any improvements carried out on the existing water or waste water network as part of these works may be eligible for financial contribution from Scottish Water under reasonable cost contributions rules. However, should there be insufficient capacity at one of our works to accommodate the process element of a non-domestic development/new business, the developer would be required to provide the necessary funding to offer a solution which permits their development to be connected.</p>	Noted. OIC seek to engage with Scottish Water at pre-feasibility stage and these aspects would be considered during feasibility/EIA processes.
Scottish Water	<p>Scottish Water Network Infrastructure: It may be necessary for the Developer to carry out further investigations on the network to ensure it can support the proposed development/new business without causing detriment to existing customers.</p> <p>Should mitigation be identified it will be the developer's responsibility to carry out these works. Again, this may be eligible for a financial contribution from Scottish Water under reasonable cost contributions rules.</p> <p>Please note, as per Scottish Water's Surface Water Policy (found at scottishwater.co.uk on the Document Hub page), only foul flows will be permitted into the combined sewer and all surface water must be separated.</p>	Noted. As and when proposals are taken forward we would seek to engage with Scottish Water at pre-feasibility stage and these aspects would be considered during feasibility/EIA processes.
Scottish Water	<p>Early engagement with Scottish Water is encouraged.</p> <p>Given the importance of having infrastructure in place to support future economic development of the harbour, we would recommend that Scottish Water be added to the list of Key Stakeholders.</p>	Now that the masterplan has been adopted there will be some prioritisation and identification of timescales for moving proposals forward. Once this has been achieved we will seek engagement with Scottish Water, if possible prior to the commencement of feasibility so that we can indeed identify potential impacts and relevant mitigation at the earliest stage.
Scottish Natural Heritage (SNH)	<p>We acknowledge that the Environment Report has incorporated the majority of the comments we offered at the Scoping stage. We have made some comments on the assessment of environmental effects, cumulative assessment and habitat regulations appraisal sections of the Environmental Report, and look forward to receiving a copy of the SEA statement in due course to see how our comments have been integrated into the final Masterplan.</p>	Noted.
SNH	<p>We appreciate that the specific details of the various proposals described in the Masterplan will become apparent later on in the process. However, at this stage it is clear that the scale, location and nature of the developments may result in disturbance to important species and habitats in the area and also may have significant landscape implications. Therefore, we recommend early consultation on the individual projects to identify potential issues and mitigation as early as possible.</p>	Noted and agreed. An implementation plan will shortly be developed for each of the proposals as part of the Outline Business Case and we would seek to discuss this in detail with SNH over the coming weeks to determine what further survey and analyses

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
		activities are required prior to and during feasibility and the timescales for these.
SNH	<p>Aims and Objectives: As mentioned in our Scoping response it was hoped that through the environmental assessment process, consideration could be given to the inclusion of opportunities for environmental enhancement as well as economic and social benefits. We would be happy to give further advice on opportunities to include environmental enhancements if required.</p>	<p>We fully agree that all opportunities for environmental enhancement as well as economic and social benefits should be considered.</p> <p>The Masterplan has been updated to reflect the emerging policies on climate change. As part of this there are thematic measures now included which focus on harnessing lower emission transport and fuel options in the future and promoting activity travel; further amendment has been made with regard to identifying opportunities for environmental enhancement.</p>
SNH	<p>Assessment of Environmental Effects: Table 4-4 provides a summary of the results of the assessment by proposal and objective. The results show that four out of the five proposals ‘substantially detracts’ from Objective 2. Avoid damage to the biodiversity flora and fauna within the vicinity of the Orkney Islands.</p> <p>There is a number of potential impacts missing from the table in Appendix C and although this may not affect the outcome of the summary assessment it could have implications for the individual proposals.</p>	<p>Noted. Any option included within the Orkney Harbours Masterplan is considered to have some impact on the environment to varying extents. These aspects will be addressed at feasibility stage/through the completion of a detailed Environmental Impact Assessment (EIA) for each proposal.</p> <p>During this process we are keen to engage with SNH to inform next steps with regard to environmental aspects and how addressing these fits with the proposed timeline for delivery of individual proposals.</p>
SNH	<p>Developments proposed in the draft Masterplan have been identified with the express objective of substantially increasing the range and volume of commercial activities within the Harbour Authority Area, with associated potential for significant disturbance and/or permanent displacement of a number of the qualifying features of the Scapa Flow and/or North Orkney pSPAs. The indirect disturbance impacts are inextricably linked to the proposed Harbours Masterplan and consideration of these effects is of critical importance to a robust assessment, including HRA, at a strategic (Masterplan) level.</p> <p>A robust assessment, including HRA, at a strategic (Masterplan) level should include spatial analyses to inform high-level assessment of the potential impacts of disturbance caused by vessel movements.</p>	<p>The impact of disturbance was considered in detail in the AA carried out for the masterplan.</p> <p>For context Scapa Deep Water Quay will not have a significant impact on the volume of vessel movements in Scapa Flow; indeed it may reduce vessel movements in some respects.</p> <p>It is worth noting that there are already a substantial number of vessel movements to and from Scapa Pier servicing STS, Flotta and rigs at anchor; it should also be noted that movements of larger vessels are now significantly lower in Scapa Flow than in previous years, given the decline in Flotta traffic.</p> <p>The intention is to have rigs alongside – this will reduce the number of vessel movements currently handling rigs at anchor.</p> <p>For the offshore wind market there would be one vessel calling at the quay several times per month. Again this equates to a relatively low number of vessel calls per annum.</p>

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
		<p>With regard to designated lanes / channels – these already exist, with vessel using the dedicated channels to access and exit Scapa Flow.</p> <p>Without this new infrastructure Orkney will not be able to capitalise on the offshore wind market – this would be of significant economic and social disbenefit to Orkney for the short and longer term – given that there is significant future potential for offshore wind.</p>
SNH	<p>Impacts to benthic ecology from the construction and operational phases should be taken into consideration within both plan and project level assessments for all of the proposed harbour developments.</p> <p>Although none of the proposed developments are within a designated site for benthic features, some of the potential impacts could be wide reaching (e.g. risk of introduction of invasive non-native species) and so impacts on more distant sites may need to be considered where connectivity is demonstrated.</p> <p>Also, once any dredge disposal sites are determined, impacts on relevant designated sites in their vicinity also need to be considered. The list of Priority Marine Features (PMFs) should be used to focus assessment of benthic impacts in wider seas.</p> <p>We would be happy to share data on PMFs to help inform plan and project level assessments.</p> <p>We will be happy to provide further advice on benthic survey requirements and methods, as required.</p>	<p>Noted and agreed that benthic survey work will be necessary to inform the impact assessments of individual projects.</p> <p>However, we do not feel that it is appropriate to undertake an assessment at masterplan level for a number of reasons: none of the proposed developments are within a designated site for benthic features; it may be the case that some or all of the proposals do not go ahead and thus such an assessment would be impractical.</p> <p>An Outline Business Case is currently being developed which also considers an implementation plan for each proposal. We feel that it would be beneficial to work with SNH to inform that implementation plan with a view to setting out key actions and activities and when they should be undertaken; it may be pertinent to conduct such surveys and assessment prior to the commencement of feasibility, for example.</p>
SNH	<p>The results show that all five proposals ‘detracts’ from Objective 3 – Prevent introduction of new invasive species into the Orkney Islands. The justification provided in Appendix C for not significantly detracting appears to be that ‘construction vessels and vessels are likely to be from the United Kingdom (UK)’. The aim of the Masterplan is to increase the range and volume of commercial activities, therefore if there is the possibility that vessels, including cruise ships, from out with the UK will potentially use these harbour developments, then this objective should be re-assessed accordingly.</p>	<p>The Masterplan does not envisage a significant increase in cruise ships, whilst all other increases in vessels comprise increases in the same type of vessels that call at Orkney at present. There are already measures and processes in place so that the introduction of new invasive species is prevented. These measures and processes will be applied to any additional vessels calling at Orkney. It is our view that this objective does not require re-assessment.</p>
SNH	<p>The proposals for harbour works at Stromness have the potential for significant effects on the special qualities and local specific qualities (LSQ) of the Hoy and West Mainland National Scenic Area (NSA). Stromness is the main settlement located centrally within the NSA and is identified as a LSQ, with a distinctive townscape, setting and links with the sea. As such, SNH will require further consideration and recognition of the NSA in both the strategic and local development proposals.</p>	<p>There are no major proposals for Stromness and none that would essentially detract from its status as an NSA – indeed, the contrary is possible true: there will be additional marina berths and a pontoon for cruise liners included in the masterplan, as well as reconfiguration of the marina / ferry terminal area in terms of parking, traffic management, walking areas, etc. The only proposal that we assume is being referred to here is the small area of</p>

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
		reclamation next to Copland's Dock Pier. This proposal will actually have a positive impact on the NSA as it might encourage more activity to come out of Stromness town and round to Copland's Dock, thus improving the visual amenity, congestion and sense of place within Stromness itself.
SNH	The results for all the harbour proposals 'detract' or 'substantially detract' from Objective 11. Maintain or improve soil quality and prevent any further degradation of soils and Objective 12. Protect and enhance the state of the water environment. Dredging, land reclamation and construction of new coastal/marine infrastructure all have the potential to lead to transport, erosion and deposition of sediment which in turn can lead to loss of habitat, biodiversity and storm protection. Therefore, we suggest considering, at the Masterplan level, how the proposed developments may affect the movement of sediment and what the resulting impacts may be.	The Masterplan is a blueprint, no feasibility has been undertaken for any proposal. In our view the analysis of how dredging, land reclamation and construction might impact on the movement of sediment can only and should be undertaken at project level. We would envisage analysis of this matter commencing as soon as a decision has been made at Council level with regard to which proposals might be taken forward.
SNH	Cumulative Assessment: We note that Marine renewable developments, other port and harbour developments, cable installations and general shipping were considered in analysing cumulative impacts. Aquaculture, tourism, any upgrading of roads and onshore renewables, as well as any in combination effects with existing policies such as ballast water management should also be considered as part of the cumulative assessment.	Noted. At the strategic level the cumulative impact assessment highlighted other key developments within the area. The AA included a more detailed cumulative assessment and included aquaculture. Further consideration of cumulative impacts will be considered at project level during the EIA and HRA stages.
SNH	HRA: It is important to note that if there are likely to be significant effects arising from the Masterplan on any European sites, that the Responsible Authority cannot approve the Masterplan unless an Appropriate Assessment has been carried out which demonstrates there will be no adverse effects on the integrity of these sites.	Noted. An AA was carried out and given the uncertainties around the final project details (design and construction methodologies) in the plan level, taking a precautionary approach, the conclusion of any adverse effect on site integrity was deferred to project level HRA. The AA recommended that at the project stage additional information, including bird survey data, should be gathered in order to collate sufficient information to make a conclusion. Furthermore, at project level, more detailed mitigation will be proposed if necessary, to avoid or minimise adverse effects.
SNH	As only a summary of the HRA screening has been provided it is not clear how sites or pressures have been scoped in or out of the process. A number of pressures missing that should have been included in the assessment that have the potential to undermine the Conservation Objectives of marine SPA bird qualifying interests. These include; permanent displacement of birds from development footprints; disturbance of birds in the vicinity of proposed developments, in either operational and/or construction phases; and temporary or permanent loss of or damage to prey-supporting habitats in the development footprint or vicinity or at dredge spoil disposal sites. There is also potential for connectivity with breeding bird interests of a number of seabird colony SPAs in instances where development locations are within Mean Maximum Foraging Range. These should be identified and considered at the HRA screening phase.	Noted. The HRA Screening was consulted upon with SNH separately to the Environmental Report.

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
SNH	<p>With respect of the direct effects of the infrastructure developments (including land reclamation where applicable) identified within the Plan, those at Kirkwall, Hatston Scapa and Stromness have the potential for likely significant effects for several qualifying bird features of the North Orkney or Scapa Flow pSPAs through displacement and/or loss of supporting habitats.</p> <p>The development of a new port facility at Scapa Deep Water Quay would generate likely significant effect for black-throated diver and additional disturbance impacts would be associated with vessel movements to and from the new pier. The development of a new port facility at this location has potential to undermine the Conservation Objectives, and hence site integrity of the Scapa Flow pSPA.</p>	<p>Noted. This impact has been considered in the AA. It is understood from the submission that the black-throated divers are not breeding in this location, thus would it be pertinent to suggest that the impacts are less significant than they would be if the birds were breeding in this location.</p> <p>The new quay will to some extent reduce new vessel movements with a decrease in vessels movements associated with having rigs alongside rather than at anchor.</p> <p>There are already a considerable number of vessel movements in the vicinity of the birds. The impact will be considered further during feasibility, EIA and HRA at the project stage.</p>
SNH	<p>In the event of Scottish Ministers approving classification of Orkney Inshore Waters, rather than North Orkney pSPA and Scapa Flow pSPA, any HRAs would subsequently need to be updated accordingly.</p>	<p>Orkney Inshore Waters, North Orkney pSPA and Scapa Flow pSPA were all assessed in the AA for the masterplan,</p>
SNH	<p>Measures Envisioned for the Prevention, Reduction and Offsetting of Any Significant Adverse Effects: Measures envisaged for the prevention, reduction and offsetting of any significant adverse effects has been provided in Table 5-1 as recommended in our Scoping response. However, we note that residual impacts have not been considered in the Environmental Report and will be assessed following implementation of mitigation measures. It is important that the likely residual effects are clearly identified.</p>	<p>Noted. Residual impacts will be considered during feasibility, EIA and HRA at the project stage for the proposals as they are taken forward.</p>
SNH	<p>Fit with Key Policies and Plans: The plan has been developed in cognisance of key national, regional and local plans and policies. However, the context provided for the National Marine Plan (NMP) at Appendix A is at a high level and only a subset of the NMP guiding principles are included in the consideration of fit with the draft Masterplan. It may be useful to take account of all General Policies in making a comparison of fit with the draft masterplan.</p>	<p>A more detailed summary has been provided at Appendix A of the final masterplan. In our view it is not beneficial to create an additional table showing how each of the proposals fit with each of the 20 or so planning policy principles, as this does not tell us anything more than what is already presented. Specific areas where there is significant fit or clearly not with such policies will be made clear during the planning and feasibility processes at project level.</p>
SNH	<p>Outline requirements and Objectives: The Environment objective within the draft Masterplan is to ‘safeguard and support the long-term productivity of the coastal and marine environment through best practice and strong environmental stewardship’. This objective could be more aspirational, for example through reflecting the principals of enhancement of the health of the marina area and net environmental gain.</p> <p>The plan could also be bolder in relation to climate change, particularly in light of the climate emergency which is now widely acknowledged. We recommend that the plan considers ways to mitigate for and adapt to climate change, which could include consideration of specific policies / approaches for opportunities for protection of ecosystem services, and ensuring contingency within the plan for adaption to the effects of climate change.</p>	<p>The masterplan has been updated to reflect the emerging policies on climate change. As part of this there are thematic measures now included which focus on harnessing lower emission transport and fuel options in the future; further amendment has been made with regard to identifying opportunities for environmental enhancement.</p> <p>In terms of ensuring contingency within the plan for adaptation to the effects of climate change, the masterplan is a live document so to speak, so when it is reviewed and updated (which will likely be on a three year basis) any emerging factors can be incorporated.</p>

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
SNH	A series of outline requirements to help enable delivery of the plan objectives is included in this section of the plan. However, environmental themes are not very clearly carried through to the list.	The outline requirements were originally defined as part of the master planning process to guide the appraisal and selection of preferred options. It is not possible to change these now unfortunately; however, there are new sections regarding climate change including a range of thematic measures that will be applied to proposals as and when they are developed and delivered.
SNH	Masterplan Proposals: We appreciate that the specific details of the various proposals described in the Masterplan will become apparent later on in the process. However, at this stage it is clear that the scale, location and nature of the developments may result in disturbance to important species and habitats in the area and also may have significant landscape implications. Although we have highlighted some of these our response to the Environmental Report, detailed in Annex 1, we would recommend early consultation on the individual projects to identify potential issues and appropriate mitigation as early as possible.	Noted. It is envisaged that we will engage with SNH shortly, particularly to develop the implementation plan and requirements for each proposal with respect to environmental assessment and considerations.
SNH	Appendix C Proposed Development Policy Principles: A series of proposed development policy principles to safeguard particular geographic areas from other types of development/activities are outlined in Appendix C. The Orkney Islands Regional Marine Planning process should be a useful and transparent mechanism to discuss and develop these policies. Therefore, it would be good for these proposals to remain as draft until the Regional Marine Planning process has concluded	Noted.
SEPA	SEPA are content that most of SEPA comments at the Scoping Report consultation stage have been taken into consideration in this ER.	Noted.
SEPA	Table 5-2 references dust and noise to be monitored during construction and SEPA under the responsibility and timescales section. The local authority is the responsible authority for local air quality management under the Environment Act 1995.	Noted. This has been updated in the monitoring framework table.
SEPA	Where the SEA has identified the requirement for monitoring and proposed remedial actions we would expect the responsibility and time scales for this to mainly fall to the applicant.	Noted. Remedial actions will be the responsibility of OIC.
SEPA	A.1 Plan, Policy and Strategy review: River Basement Management Planning (RBMP) – we highlight that as well as pollution the works will also need to be considered in regard to potential impact of the morphological classification of the relevant waterbody to prevent a deterioration.	Noted. Morphological changes will be considered as part of the feasibility and EIA stage as each project moves forward.
SEPA	It would be clearer if the assessment matrix in Appendix C directly linked the assessment result with the proposed mitigation measures, (which we note are detailed separately in Table 5-1).	Noted. The mitigation measures were originally included within the assessment matrix, but this led to lots of repetition and led to a complex matrix. Therefore these were left separate for ease of digest.
SEPA	We would like to see consideration in the masterplan of the need for potential adaptation to mitigate possible climate change effects on the proposed infrastructure at all the sites it covers. Although climate	The masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
	<p>change is referenced in the Strategic Environmental Assessment (SEA) the only mention of climate change in the plan is in relation to possible changes in Orkney's future fuel supply. Consideration also needs to be given to minimising greenhouse gas emissions and the Harbour Authority's carbon footprint as referenced in the SEA.</p>	<p>Scotland, along with a more detailed description of measures to support this policy.</p>
SEPA	<p>We would welcome reference in the plan to the Scottish Climate Change Adaptation Programme, which sets out Ministers objectives, policies and proposals to tackle the climate change impacts identified for Scotland. In addition the plan could also usefully reference work from the Marine Climate Change Impacts Partnership in relation to adaptation or climate smart working.</p> <p>Reference to the programme could be added to the Key Policies and plans listed on page 17. The key consequences of climate change that are applicable to this plan identified and need to develop appropriate adaptation strategies. An outline requirement could be for example: adaptation to mitigate possible climate change effects on the proposed infrastructure.</p>	<p>Noted. Reference has been made to the Scottish Climate Change Adaptation Programme, as well as cognisance of the United Kingdom Maritime Component Command (UKMCC), as it could offer some excellent best practice examples in the field of harbour operations and infrastructure development.</p> <p>The outline requirements were developed at an early stage in the master planning process to guide the appraisal and selection of preferred options for development. In our view it is not possible to revise these outline requirement post-appraisal. However, we feel that the amended section which covers climate change addresses comments adequately. Bearing in mind that the masterplan is a 'blueprint' there will be detailed EIAs undertaken for each proposal as they proceed and it is assumed that climate change impact will be a key element within this, along with the identification of potential mitigation measures.</p>
SEPA	<p>We welcome the Mitigation and enhancement measures in the bulleted list on page 54 and example the requirement for a Flood Risk Assessment at the planning phase. There are other issues such as biosecurity that will also require to be addressed. As such we have also provided below and in attached Appendix 1 generic advice on marine related developments such as those covered in the masterplan to consider as the proposals progress through the Environmental Impact Assessment (EIA)/planning process. Biosecurity for example is covered in Section 3.3 of Appendix 1. It would be useful to add other assessments to this section of the plan that will be required in support of the proposals or individual aspects as per the example below (see also comments in section 4.5 below).</p>	<p>Noted. Please see revised section on Environmental Considerations (Pages 60 – 65 of the final masterplan).</p> <p>We would wish to engage with SEPA prior to commencement of feasibility, to ensure that all relevant aspects and issues are addressed and developed appropriately.</p> <p>An implementation plan as part of the Outline Business Case will be developed. We would seek input from SEPA with regard to identifying actions and timescales in relation to points raised.</p>
SEPA	<p>The proposals for Scapa Deep Water Quay include "Area excavated from steep hillside immediately behind new quay position. Rockfill created used to in infill quay and reclamation area, to provide cut/fill balance. Exact route of road from public road to site to be determined by local topography, consents and gradients required for vehicles movements" and a 5+ha laydown area.</p> <p>The GIS layer Landcover Scotland 2015 shows heather and bog as well as grasslands within the area proposed for this development; there is the possibility for Groundwater Dependent Terrestrial Ecosystems (GWDTE) to be present. This area will need to be surveyed according to our guidance LUPS-GU31.</p>	

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	<p>In order to assess the potential risk to GWDTE a Phase 1 habitat survey should be provided both within and outwith the site boundary, within the following distances of development as a minimum: a) within 100m radius of all excavations less than 1m in depth; b) within 250m of all excavations deeper than 1m.</p> <p>However, if it is suspected that there may be relevant habitats on site, a National Vegetation Classification (NVC) survey can be provided and/or if SNH have requested a NVC survey for all or part o the site then we would accept this information.</p>	
SEPA	<p>We have no site-specific flood risk advice on the draft plan other than to welcome the commitment in the plan for each development to be subject to a detailed Flood Risk Assessment. However we would take this opportunity to provide advice to assist as the proposals in the plan progress through planning.</p>	<p>Noted. Please see revised section on Environmental Considerations (Pages 60 – 65 of the final masterplan).</p>
SEPA	<p>For information the expected sea level rise for Orkney Islands is 0.93 metre (m) by 2100 based on the latest UK climate change predictions reported in 2018. We would recommend that this allowance is taken into consideration to ensure that any development of the site is sustainable and to account for uncertainties and the effects of wave action.</p>	<p>We would wish to engage with SEPA prior to commencement of feasibility, to ensure that all relevant aspects and issues are addressed and developed appropriately.</p>
SEPA	<p>With regards to leisure development such as cafes, we would recommend a minimum freeboard of 600 millimetres (mm) above the flood level is applied to finished floor levels.</p>	<p>An implementation plan as part of the Outline Business Case will be developed. We would seek input from SEPA with regard to identifying actions and timescales in relation to points raised.</p>
SEPA	<p>It should be noted that, without further flood risk information, we would object to any proposals for overnight accommodation, or any development which falls within the ‘Highly Vulnerable Uses’ category or our Land Use Vulnerability Guidance.</p>	
SEPA	<p>The diversification into other industrial sectors through the ability to handle larger vessels brings with it the possibility that environmental permitting or licensing of associated infrastructure may be required e.g. silos for offshore Cement supply, new Fish effluent discharges, the boatyard repair, lift out and maintenance facility etc. There may also be an increase in the throughput capacity of existing units due to handling larger vessel, these may also require licensing if thresholds are met.</p>	
SEPA	<p>It is recognised that at Hatston part of the proposal includes the construction and operation of a fuelling depot comprising 2 x 3,000 tonne bunded tanks. Such a facility would fall within Control of Major Accident Hazards (COMAH) as a Lower Tier establishment. Prior to construction and operation the Harbour Board / operator will need to contact the COMAH Competent Authority (CA) to discuss their needs. Similarly, any Liquefied Natural Gas (LNG)/ Liquefied Petroleum Gas (LPG) bunkering hub/storage facility (e.g. that proposed for Flotta) is likely to be captured under the COMAH Regulations and require the production of a Pre-Construction Safety Report.</p>	
SEPA	<p>The report recognises that the development at Lyness will be on a brown field site. There have been previous discussions regarding the need for soil contamination investigation and remediation at this site that will need to be revisited as part of any development here.</p>	<p>Noted.</p>

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SEPA	We welcome the commitment to produce a Construction Environmental Management Plan detailing how impacts on biodiversity, flora and fauna will be avoided/mitigated, and the mitigation and enhancement measures detailed on page 54. As previously noted the proposals include for example at Scapa Deep Water Quay a 5+ hectare laydown area. Please be advised that a Controlled Activities Regulations (CAR) construction site licence will be required for management of surface water run-off from a construction site, including access tracks, which: is more than 4 hectares; is in excess of 5 kilometres (km); or includes an area of more than 1 hectare or length of more than 500m on ground with a slope in excess of 25°.	<p>Noted. Please see revised section on Environmental Considerations (Pages 60 – 65 of the final masterplan).</p> <p>We would wish to engage with SEPA prior to commencement of feasibility, to ensure that all relevant aspects and issues are addressed and developed appropriately.</p> <p>An implementation plan as part of the Outline Business Case will be developed. We would seek input from SEPA with regard to identifying actions and timescales in relation to points raised.</p>
SEPA	Land reclamation: as the proposals progress we would like details (quantity, type, source) of appropriate infill material to demonstrate no waste material will be used for such proposals.	
SEPA	We welcome the consideration of placemaking in the masterplan, for example to provide better facilities and reference to “After construction landscaping, re-vegetation and habitat enhancement should be undertaken in line with appropriate guidelines” and for waterfront development in Kirkwall to “Improve experience in terms of visual amenity/sense of place”	
SEPA	We would welcome proposals to connect the harbours to the wider environment. Onshore transport could be considered further, i.e. connecting the proposed expanded harbours to the settlements and beyond. This could include vehicle transport, including sustainable transport options and other connection options such as cycle routes and walking paths for use by local residents and the cruise market.	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy. See Pages 10 – 16 and 62 of the final masterplan. This context includes the potential future provision of sustainable transport options and connectivity with existing and future walk and cycle networks.
SEPA	The plan references 52,000 cars travelled on the two Northlink services, delivery of fuel supply and lower carbon fuelling opportunities. Consideration should be given to travel modes in the future. For example installing electric charging points/hydrogen refuelling stations at the harbours.	The Masterplan has been updated to consider climate change and decarbonisation. As part of this cognisance is given to the fact that the type of fuel currently used in the shipping industry is going to decarbonise over time; the masterplan proposals must therefore be futureproofed so that they can accommodate different types of fuelling systems in the medium to long term.
SEPA	Any opportunities to link the harbours to the wider environment through the creation /enhancement of green / blue infrastructure would be welcomed.	The following text has been added to the context regarding climate change: <i>many of the masterplan proposals will have a positive impact on visual amenity, through improvements to layouts, traffic flows and removing conflict between different operational activities. There will be other opportunities to enhance the environment, particularly through the creation of green infrastructure; this might be plants or shrubs positioned to aid vehicular or pedestrian traffic management; or using plants to make particular spaces more attractive.</i>

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SEPA	<p>We welcome the reference in the SEA to “Undertake Water Framework Directive (WFD) Assessment for all developments”. Although this requirement does not appear to be detailed in the plan. We recommend that the plan is cross referenced with the SEA (Table 5-1) and all such assessment and mitigation are detailed in Section 5 Environmental Considerations of the Plan. This could be done by amending the existing Mitigation and enhancement measures section by splitting the information detailed in this into two sections. Firstly required assessments/surveys such as Flood Risk Assessment (FRA) etc which are required pre commencement of works/to inform the proposals. The second section mitigation and enhancement measures to offset impact.</p>	<p>Noted. Please see revised section on Environmental Considerations (Pages 60 – 65 of the final masterplan)</p> <p>We would wish to engage with SEPA prior to commencement of feasibility, to ensure that all relevant aspects and issues are addressed and developed appropriately.</p> <p>An implementation plan as part of the Outline Business Case will be developed. We would seek input from SEPA with regard to identifying actions and timescales in relation to points raised.</p>
SEPA	<p>With regard to the River Basin Management Plan and example the Kirkwall coastal water body (ID: 200234), this water body is already classified as “Good”. However there are various proposals outlined in the plan including land reclamation that will have an impact of the morphological classification of the relevant waterbody. This should be given consideration at the EIA stage to ensure there is sufficient capacity in the receiving environment to prevent a deterioration. We can provide further waterbody specific advice as the proposals progress to assist.</p>	
HES	<p>There is potential for some of the proposals to have impacts on the historic environment and we therefore recommend early consultation and engagement to identify potential impacts and relevant mitigation at the earliest stage.</p>	<p>Now that the Masterplan has been adopted there will be some prioritisation and identification of timescales for moving proposals forward. Once this has been achieved we will seek engagement with HES, if possible prior to the commencement of feasibility so that we can indeed identify potential impacts and relevant mitigation at the earliest stage.</p>
HES	<p>Outline requirements and objectives: <i>It might perhaps be more aspirational to consider safeguarding and supporting the coastal and marine environment as a whole rather than just productivity (in reference to the environmental objective).</i></p> <p><i>We consider that the historic environment can help to support sustainable places and activities and can be reflected in both the socio-economic and environment objectives of the Masterplan. It is widely recognised that the sense of place and strong cultural identity provided by the historic environment plays a crucial part in the sustainability of communities, as well as benefitting the economy and tourism. The outline requirements could more clearly demonstrate the environmental objectives of the Masterplan.</i></p>	<p>The masterplan objectives and outline requirements were defined at an early stage in the master planning process to guide the appraisal and selection of preferred options in terms of infrastructure proposals. Unfortunately it is not possible to revise these or retrofit them, as the appraisal process has already been undertaken and the preferred options selected. As and when the projects are taken forward we understand that the EIA will address the impact on the historic environment, as well as identify the opportunities associated with the historic environment and the role that it plays.</p>
HES	<p>Masterplan Proposal: We consider that some of the proposals may have the potential to have impacts on unknown or undesignated marine historic environment assets and therefore mitigation may be required. We would therefore recommend that early consultation is undertaken on individual proposals to allow for adequate survey and design options to be put in place to mitigate any impacts.</p>	<p>Noted and agreed. As and when the proposals proceed we would envisage consultation with HES to further develop the approaches and surveys outlined in the comments. We would envisage early engagement with HES, prior to the commencement of feasibility. An implementation plan will shortly be developed for each of the proposals as part of the Outline Business Case and we would seek</p>

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		to discuss this in detail with HES over the coming weeks to determine what further survey and analyses activities are required prior to and during feasibility and the timescales for these.
HES	<p>Kirkwall – the harbour at Kirkwall is category B listed and the improvements to the fish landing area in the basin may therefore require listed building consent; we recommend consultation with the planning department regarding this issue.</p> <p>We note that dredging is proposed to allow berthing of larger vessels to the additional multipurpose quay infrastructure. Dredging has the potential to damage or destroy marine historic environment assets such as wrecks and a survey of this area and the areas proposed for reclamation may be required along with further mitigation if assets are identified.</p> <p>In addition the proposed changes to the quayside will alter the setting of the B listed harbour and C listed harbour light as well as the conservation area and consultation with the Council conservation advisor should be undertaken. We note that some elements of the harbour fall within the conservation area so any potential demolition of buildings within this area may require conservation area consent.</p>	Noted and agreed. As and when the proposals proceed we would envisage consultation with HES to further develop the approaches and surveys outlined in the comments. We would envisage early engagement with HES, prior to the commencement of feasibility.
HES	Hatston pier and terminal – as with Kirkwall there is the potential for reclamation works to damage or destroy unknown or undesignated marine historic environment assets. A survey to identify potential assets may be required and further mitigation if assets are identified.	
HES	Scapa Pier – as above, the dredging and reclamation in this area has the potential to damage or destroy any unknown or undesignated marine historic environment assets in the area. Survey of this area may be required and further mitigation if assets are identified.	
HES	Stromness and Copland’s Dock – we note that the area identified for the traffic management review and review of infrastructure is located within the conservation area and consultation with the Council conservation advisor is recommended. As above, the reclamation in this area has the potential to damage or destroy any unknown or undesignated marine historic environment assets in the area. Survey of this area may be required and further mitigation if assets are identified.	
HES	Scapa Deep Water Quay – the current plan does not appear to indicate that dredging will be required, however the limited area for reclamation may require further survey at project stage as noted above	
HES	Lyness – we note that the areas of hardstanding are proposed in the vicinity of category A listed structures, however we are content that the proposals are unlikely to have significant effects on the setting of these assets.	
HES	Environmental considerations: We welcome that an SEA objective for cultural heritage has been included, however we consider that a more positive objective could have been used. It may have been useful to	Noted. At plan level the negative effects have been identified so as to identify suitable mitigation measures. At project level we will

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	consider sub-objectives or criteria which focused on identifying beneficial outcomes where improvements or enhancements to the baseline may have been possible.	consider inclusion of positive objectives and how positive impacts could be achieved.
HES	Management and commercial considerations: We welcome that we have been identified as a key stakeholder in the process going forward and that ongoing engagement with stakeholders is proposed. As noted above we recommend that further consultation on individual proposals is undertaken at an early stage to ensure appropriate mitigation for the historic environment is achieved.	Noted. We will seek early engagement with HES, so that we can indeed identify potential impacts and relevant mitigation at the earliest stage.
HES	Proposed development policy principles: We note that this Masterplan only covers up to 2040 and that there is a the potential that there may be longer term requirements for more harbour structure around Scapa Flow including around Flotta. We would like to note that there is the potential for a Historic Marine Protected Area (HMPA) to be designated within Scapa Flow and that this should be taken into consideration when identifying future potential proposals.	Noted. OIC will continue to monitor the status of the proposed Scapa Flow HMPA and will ensure that the Masterplan Proposals are taken forward in accordance with any future statutory requirements associated with a HMPA designation. Local planning policy will also be updated to reflect any future HMPA designation.
HES	Section 1.4 of the Environmental Report refers to scoping comments received from the Consultation Authorities and the summary of those comments in Appendix D; however we note that comments from HES have not been included in the appendix. It is not clear from reading through the Environmental Report and draft Masterplan that our scoping comments have been taken into account in the preparation of the documents.	Noted. Unfortunately these comments were not obtained from the SEA Gateway.
HES	Table 3-1 (and Appendix B) refer to Scottish Historic Environment Policy 2011 (SHEP). This has now been replaced by the Historic Environment Policy for Scotland (HEPS 2019) and at the time of the assessment would have been the Historic Environment Scotland Policy Statement 2016 (HESPS). In addition, we note that the reference to Scottish Planning Policy (SPP) is to SPP 2010 rather than SPP 2014. We recommend that the policies in this table are updated as we suggested in our scoping response. We would also recommend that Our Place in Time the historic environment strategy for Scotland should be included here as a relevant strategy document.	Noted. Unfortunately these comments were not obtained from the SEA Gateway.
HES	Table 3-2 on baseline data identifies HES as the data source for protected areas and controlled sites; we would note that Ministry for Defence is responsible for the identification and administration of these sites. We note that no references to terrestrial historic environment assets other than the World Heritage Site are referenced and given the scope of the plan these should have been included.	Noted. Unfortunately these comments were not obtained from the SEA Gateway.
HES	SEA objectives: While we welcome that cultural heritage has been scoped into the assessment and that an SEA objective has been provided, we consider that there was the opportunity to include an objective that would have allowed for more positive outcomes as indicated in our scoping advice. It may have been useful to consider sub-objectives or criteria which focused on identifying beneficial outcomes where improvements or enhancements to the baseline may have been possible.	The masterplan objectives and outline requirements were defined at an early stage in the master planning process to guide the appraisal and selection of preferred options in terms of infrastructure proposals. Unfortunately it is not possible to revise these or retrofit them, as the appraisal process has already been undertaken and the preferred options selected. As and when the projects are taken forward we understand that the EIA will address the impact on the historic environment, as well as identify the

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		opportunities associated with the historic environment and the role that it plays.
HES	We note that the proposals at Lyness have not been included in the assessment as this was only added to the preferred options after the SEA was completed. In this instance we are content that the minimal proposals at Lyness will not have significant impacts on any historic environment assets in the vicinity of the proposals.	Noted.
HES	Assessment of environmental effects: Table 4-4 summarises the results of the assessments which are presented in detail in Appendix C. We consider that in some instances there is the potential that impacts on cultural heritage have been under-estimated and we have provided further comments in the section below on Appendix C. We are content with the proposed summary of potential impacts at section 4.5.	Noted.
HES	Assessment conclusion: Table 5-1 contains 4 measures identified for cultural heritage impacts. A number of the mitigation measures refer to Local Plan Policy LP/T3 on roads. It is not clear why this policy has been chosen for cultural heritage impacts and it would be more relevant to reference up to date policies on cultural heritage. It is not clear why there are two separate issues/impacts identified for construction impacts, however we note that mitigation proposed is mostly similar for both impacts.	Noted. Impacts and potential mitigation from construction of new infrastructure resulting in damage to, or loss of, cultural heritage, including the maritime heritage, will be managed in accordance with Orkney Local Development Plan Policy 8 Historic Environment and Culture Heritage. We will seek to engage with HES to ensure that any required detailed mitigation is incorporated at the construction phase.
HES	We welcome that the potential for impacts on previously unknown archaeology has been identified and that the suggested mitigation is for survey work to be undertaken. We would stress that this survey work should be undertaken early in the design and EIA process to ensure that if assets are identified further adequate mitigation can be put in place, including altering the design if necessary. This survey work should be undertaken for potential marine heritage assets as well as terrestrial assets.	Noted. Survey work will be undertaken to determine presence of underwater archaeology at an early stage.
HES	We note that where cultural heritage features are identified mitigation is proposed at construction stage and involves work taking place under archaeological supervision. At this stage in the process it is not possible to be confident that this mitigation will be appropriate as the sensitivity of any assets which may be identified is unknown. Appropriate mitigation may require alterations to the design at an earlier stage rather than archaeological supervision of works at construction stage. We will be happy to provide detailed advice on mitigation for assets within our remit, including marine heritage assets as the individual proposals progress.	Noted.
HES	We are content that potential impacts on the setting of any assets within our remit can be mitigated by appropriate sensitive design and we recommend early consultation to assist with this.	Noted. Now the masterplan has been approved there will be some prioritisation and identification of timescales for moving proposals forward. Once this has been achieved we will seek engagement with HES, if possible prior to the commencement of feasibility so that we can indeed identify potential impacts and relevant mitigation at the earliest stage.

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HES	<p>Appendix B – Environmental baseline</p> <p>B-7 on cultural heritage is very brief. Scheduled monuments are not included as a type of designated asset apart from in the case of the scheduled wrecks at Scapa Flow. We would also note that undesignated cultural heritage assets should be included in this section.</p>	Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals.
HES	<p>We note that there are no future trends identified for cultural heritage. We consider that it is likely that further cultural heritage assets will continue to be identified and we note that there is the potential for a Historic Marine Protected Area (HMPA) to be designated within Scapa Flow</p>	Noted.
HES	<p>In general, we consider that potential impacts on the setting of listed buildings has not been considered within the assessments. For category B and C listed buildings in proximity to proposals we recommend consultation with the Council’s conservation advisors.</p>	Noted.
HES	<p>We also note that in some instances the assessments consider that no impacts are likely as no known maritime assets are in proximity. It is not clear that records of undesignated wrecks (which can be found on the Canmore and Pastmap websites) have been taken into consideration or the potential for impacts on these.</p>	Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals and survey work will be undertaken to determine presence of additional underwater archaeology at an early stage.
HES	<p>Scapa Pier – the outcome of the assessment was a neutral impact. We consider that there is the potential that impacts have been underestimated for this proposal. The assessment states that there are no known maritime heritage assets in proximity. However, no consideration has been given to the potential for unknown maritime heritage assets, and the requirement for dredging in this proposal means there is the potential for damage or loss to any currently unknown assets. Mitigation in the form of survey work may be required.</p> <p>We are content that significant adverse impacts on the setting of assets in our remit in the vicinity are unlikely.</p>	Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals and survey work will be undertaken to determine presence of additional underwater archaeology at an early stage.
HES	<p>Kirkwall – we are content with the assessment conclusion that the works may detract. As above, we consider that there is the potential for impacts on unknown maritime heritage assets which has not been assessed from the proposed dredging and reclamation works. In addition we note that while impacts on the conservation area have been considered, direct impacts on the category B listed harbour and the setting of category B and C listed buildings do not appear to have been assessed.</p> <p>We are content that significant adverse impacts on the setting of assets in our remit in the vicinity of the proposals are unlikely.</p>	Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals and survey work will be undertaken to determine the potential for unknown maritime heritage assets at an early stage.
HES	<p>Scapa Deep Water Quay – we are content with the assessment conclusion that the works may detract. As above, we consider that there is the potential for impacts on unknown maritime heritage assets which has not been assessed from the proposed reclamation works. The assessment notes the presence of the Her Majesty's Ship (HMS) Royal Oak c. 1km away from the site, there are also 2 records of high archaeological</p>	Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals and survey work will be undertaken to determine the potential for unknown maritime heritage assets at an early stage.

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	<p>potential geophysical anomalies in close proximity to the site in the Canmore records. Further survey work and mitigation may be required at project design stage to avoid impacts on these assets.</p> <p>It is not clear from the written text of the assessment what the changes to setting are related to so it is difficult to understand this part of the assessment. However, we are content that significant adverse impacts on the setting of assets in our remit in the vicinity of the proposals are unlikely.</p>	
HES	<p>Hatston - the outcome of the assessment was a neutral impact. We consider that there is the potential that impacts have been underestimated for this proposal. The assessment states that there are no known maritime heritage assets in proximity. However, no consideration has been given to the potential for unknown maritime heritage assets, and the requirement for reclamation in this proposal means there is the potential for damage or loss to any currently unknown assets. There are records of wrecks in the surrounding area and therefore mitigation in the form of survey work and potentially further mitigation may be required.</p> <p>We are content that significant adverse impacts on the setting of assets in our remit in the vicinity of the proposals are unlikely.</p>	<p>Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals and survey work will be undertaken to determine the potential for unknown maritime heritage assets at an early stage.</p>
HES	<p>Stromness and Copland's Dock - the outcome of the assessment was a neutral impact. We consider that there is the potential that impacts have been slightly underestimated for this proposal. The assessment states that there are no known maritime heritage assets in proximity. However, no consideration has been given to the potential for unknown maritime heritage assets, and the requirement for reclamation in this proposal means there is the potential for damage or loss to any currently unknown assets. Mitigation in the form of survey work may be required.</p> <p>We are content that significant adverse impacts on the setting of assets in our remit in the vicinity of the proposals are unlikely.</p>	<p>Noted. Cultural heritage will be fully assessed during the EIA stage of the proposals and survey work will be undertaken to determine the potential for unknown maritime heritage assets at an early stage.</p>
Royal Yachting Association (RYA) Scotland	<p>Page 4 bullet point 3. The paragraph is correct and fine as a summary. However, the figure for boat numbers does not include any vessel that anchors. Skippers may anchor for a number of reasons and not just to save money. For example, marina berths might be full or the anchorage may be a better setting off point for, for example, Fair Isle. The economic impact also depends on the number of nights spent in Orkney whether for reasons of adverse weather, crew changeover or tourism.</p>	<p>There is limited availability of data regarding boats at anchor.</p> <p>With regard to quantifying the economic impacts, this will be done as part of an Outline Business Case which will be completed in Autumn 2019.</p> <p>With regard to marine leisure and the 'sailing offer' in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.</p>

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RYA Scotland	Page 14 Marine Leisure. It may be helpful to use an AIS website such as Marine Traffic to look at the sizes of yachts berthed at the Victoria Pier and Albert Dock in Lerwick. It will be worthwhile subdividing the commercial operator category as dive boats, which are particularly important at Stromness, are likely to have different requirements from tour boats.	Noted.
RYA Scotland	Page 14 Boat repair/ maintenance facility. Recreational boats can be added to the list of potential users of such a facility. There may be scope for developing the boat repair and maintenance, construction and training sector although this may better be considered as part of the Regional Marine Plan. British Marine Scotland and the Orkney Historic Boat Society may be able to contribute to developing a strategy. There may be demand for additional lift-out space for local recreational boats for winter storage, as well as for continental boats wishing to spread a cruise to the Northern Isles over two years.	Noted. There could be opportunities for winter storage and lift out facilities at Hatston and Kirkwall. A site for boat repair is identified at Hatston, though the nature of this facility has not been defined in detail – it could serve the marine leisure market or it could be more focussed on fishing boats, or larger, commercial vessels. As part of the phase 2 further consideration will be given to marine leisure requirements with regard to facilities and services that might be required in the future. Boat repair facilities required to support recreational users can also be considered as part of the regional marine planning process.
RYA Scotland	Page 15 Short term marine leisure. A berth at Scapa Pier might be particularly popular with dive boat operators and also marine tourism operators servicing cruise liners berthed at Kirkwall. Appropriate facilities might also be attractive for local boats and for visiting skippers wishing to leave their boat for an extended period of time or to facilitate a crew change. However, the demand for this would need to be assessed.	Noted.
RYA Scotland	Page 26 last sentence. It is very important to ensure that there is dedicated space for visiting yachts.	Noted.
RYA Scotland	Page 34 column 1, last sentence. Note should be taken of the implications of the Climate Change (Emission Reduction Targets) (Scotland) Bill which has completed stage two. It is unclear what the implications will be for recreational boating but with electricity produced from wind and tidal power Orkney would be well placed if there were to be a move towards electrical propulsion based on fuel cells. This comment applies to all facilities.	The masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
RYA Scotland	Page 34 last sentence. Consideration should be given to providing space for future expansion of marina berth numbers. Access to the slipway by small recreational craft on trailers should be considered.	Noted.
RYA Scotland	Page 37 Stromness. Stromness Marina is an excellent facility, particularly for vessels on passage to Pierowall, Shetland or mainland Scotland. From a navigational point of view, timing the exit by Hoy Sound is easy due to its proximity. However, space is at a premium and manoeuvring space at the south end can be constrained by commercial vessels moored to the pier. There may be scope for relocating some commercial activities, or even local boats, to Copeland's Dock or Scapa Pier if these could be made attractive options. However, one of the attractions of Stromness Marina is the mix of boats encountered, particularly the local yoles. A minor point is that there is not a clearly marked route from the marina entrance to the ferry terminal and the recycling facilities are in the ferry car lines.	The improvements on Copland's Dock should make it more attractive to commercial vessels. There is a proposal to improve the shoreside area in Stromness, which will consider parking, pedestrian routes, traffic management and facilities – your points regarding access and recycling facilities will be taken into consideration as part of this proposal.

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
RYA Scotland	Page 53 SEA. This section focusses overmuch on negative impacts. Good planning should lead to positive impacts.	Noted. At plan level the assessment is strategic, and negative effects identification enables suitable mitigation measures to be identified. At project level we will consider inclusion of how positive impacts could be achieved.
RYA Scotland	Page 53 <u>Climatic factors</u> . To reach Scottish Government targets, the carbon footprint will need to decline during the operational phase. Development provides an opportunity to invest in energy efficient technologies.	The masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
RYA Scotland	Page 53 <u>Cultural heritage</u> . There are potential positive benefits for the marine cultural heritage if the developments encourage boat building and repair of historic classes of boat as well as them being sailed. Neither Kirkwall nor Stromness has an equivalent of Hay's Dock in Lerwick and this may provide an opportunity.	Noted and agreed.
RYA Scotland	Page 53 <u>Population and human health</u> . The risk of marine accidents could be reduced by separating different types of activities as proposed. The Statutory Harbour Authority has powers to make regulations to ensure safety of navigation and increased traffic does not necessarily lead to an increased risk of accidents.	Noted. At plan level the assessment is strategic, and negative effects identification enables suitable mitigation measures to be identified.
RYA Scotland	Page 54 first bullet point. Surveys have shown that marine biodiversity is very much appreciated by recreational sailors. Scottish Hydro Electric Transmission plc has been investigating the adoption of Biodiversity Net Gain in its Scottish developments and consideration should be given to applying these principles here.	We understand that Biodiversity Net Gain is something that is being introduced into the planning regime; by the time any of these proposals are at feasibility stage it is envisaged that this will indeed be part of the process. The masterplan does include assessing opportunities to enhance the environment with measures such as habitat reinstatement and the use of green infrastructure.
RYA Scotland	Page 57 Integration with the planning and policy framework. It is surprising that no mention has been made of the Orkney Islands Marine Region Plan, which will supersede the Pentland Firth and Orkney Waters Spatial Plan. A Ministerial Direction is expected to be issued shortly to allow the establishment of the Orkney Islands Marine Planning Partnership.	Noted. Reference has now been made.
RYA Scotland	Page 80 Proposed development policy principle 2. As this proposal applies to all vessels it should be noted that recreational craft may keep in shallower water outside the main navigational channel. Any tidal devices installed in the channels leading to Scapa Flow should be well below keel depth.	The text in Proposed Development Policy Principle 2 has been amended to clarify that no marine or coastal development and/or activities should have a significant adverse impact on safe passage through any sound (e.g. West Weddel Sound, Switha Sound, Gutter Sound). The Policy Principles will be applied to developments and fixed installation proposals as opposed to recreational craft.
RYA Scotland	Finally, there is also scope for collecting additional information from visiting boats when they pay their marina dues, for example as to what features are valued, what might be improved and what encouraged them to come to a particular marina.	Noted.

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Individuals / Orkney residents	<p>The harbours' plan must be considered in the context of the Climate Emergency called recently by Orkney Islands Council. Other strategic priorities are referenced in the document but the climate emergency is the highest of priorities.</p> <p>This is an opportunity to tackle the issue of the environmental impact of cruise liners visiting Orkney. Minimum environmental standards should be placed on liners which are allowed to visit Orkney. This could be applied to individual ships or to companies.</p> <p>It seems unfortunate, in the light of the Climate Emergency that some of the proposals focus on increasing capacity for the oil and gas industry. Surely this is an opportunity to promote, encourage and enable the development of renewable energy projects, such as the current work on providing clean shore power for some of the island ferries at Kirkwall and the use of battery power for the Hamnavoe at Stromness. Orkney is already a leading hub for research and development in renewable energy and this would further promote the Islands' profile in this area of work too.</p>	<p>The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.</p>
Individuals / Orkney residents	<p>I was very disappointed to see that the draft proposal is so unambitious in terms of making swift change away from fossil fuels. Orkney is so well placed to be in the lead in this respect, and yet there is very little mention of renewable energy initiatives and means for reducing carbon emissions. In particular, there would need to be plans for the hydrogen ferry system, and clean shore power for visiting cruise ships and the Hamnavoe. I strongly feel that we have a responsibility to lead here. Why aren't we planning to do exactly that?</p>	
Individuals / Orkney residents	<p>As part of the Draft Harbours Master Plan consultation I am writing to express my disappointment at the lack of measures to achieve the cuts in carbon emissions that the Orkney Islands Council has committed to in declaring a Climate Emergency, in line with the Scottish Government. This is the first opportunity since declaring the Climate Emergency for the OIC to put words into actions and to demonstrate their commitment to a reduction in carbon emissions.</p> <p>Harbour activities are a major generator of carbon emissions, and the cruise ship industry in particular is associated with a massive carbon footprint. Orkney should be leading the way, given our reputation for innovation in marine renewable technologies, in reducing the impact of these activities, and this should be the central strategy of any Harbours Master Plan which is fit for purpose for the future. Measures need to be put in place to provide the infrastructure to make power from renewable energy available at all harbours, and action should also be taken to ensure minimum emissions standards for all visiting cruise ships.</p> <p>The OIC should be congratulated at declaring a Climate Emergency, but this now needs to be followed through and translated into direct actions if it is not to be a hollow gesture.</p>	<p>The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.</p>
Individuals / Orkney residents	<p>I am writing in the first place to thank Orkney Island Council for the stance it has taken on climate change. However, I and others feel that it is vital for Orkney Harbours to invest now in developing a low emissions fuel infrastructure, so that visiting cruise liners can adhere to minimum emissions standards. If new fuel bunkering is to be built, it would be totally counter-productive to the Council's commitment to be carbon</p>	<p>The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for</p>

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	neutral by 2025 if they invest in a fossil fuel facility. Orkney must, as a county abundant in renewable energy, lead the way, and be seen to be doing so by the rest of the world. We need to enable visiting cruise liners to use our low emissions fuels, and although this will present challenges we should consider nothing less.	Scotland, along with a more detailed description of measures to support this policy.
Individuals / Orkney residents	I was so pleased to hear OIC had declared a Climate Emergency, but I am very disappointed and concerned that their Draft Harbours Master Plan does not address the issues at the heart of the Climate Emergency. What a missed opportunity! Reducing carbons needs to be the core of the Harbours Master Plan.	
Individuals / Orkney residents	Orkney's position at the cutting edge of research into reducing emissions from the marine sector gives us a unique and important responsibility in implementing ways to do this. Projects like using hydrogen to power the inter-isle ferries and using batteries to provide clean shore power to the Hamnavoe should be a key part of the Master Plan. Furthermore, Orkney Harbours could set a brilliant lead in requiring visiting cruise ships to meet minimum emissions standards and oblige them to use our abundant renewable energy as shore power. New fuel bunkering should only be considered within the aim of enabling and encouraging use of low emissions fuel infrastructure.	
Individuals / Orkney residents	Within the context of the climate emergency and the forthcoming UK and Scottish laws on emissions reduction targets, the Draft Harbour Master Plan is, sadly, hugely irrelevant.	
Individuals / Orkney residents	I have just had a read through of the current Harbours Master Plan for Orkney. It is an impressive document, but as a local resident I am surprised that it makes no attempt to integrate with land-based infrastructure in Orkney. The community deserves more and I am shocked that OIC and its constituent parts do not seem able to take a lead in providing an overall view. For example, to date I am unclear whether the community want or need more tourists. Present numbers mean that the visitor experience in Orkney is flawed and local restless. Until the land-based infrastructure for tourism has been enhanced any attempt to increase cruise ship numbers would be irresponsible.	<p>The Masterplan does not support or promote a major increase in the number of cruise calls and passengers – rather the focus is on reducing the conflicts between cruise and other harbour-related activity.</p> <p>Enhancements at Kirkwall Pier could enable more smaller cruise ships to call alongside though it is envisaged that there would only be a marginal overall increase in passenger numbers.</p> <p>There is currently a joined approach to addressing these issues through joint working between the Destination Orkney Strategic Partnership, Orkney Harbours and wider Council departments.</p>
Individuals / Orkney residents	I'm not an expert in the oil industry so I can't comment on predictions of increase, but the thought of disturbing a pristine length of coast to create a site for the decommissioning of rigs is not a good thought. Why not use Lyness, if it has to be done in Orkney at all?	<p>Scapa Deep Water Quay is not intended for decommissioning, rather servicing the offshore wind sector and repair and maintenance of rigs and platforms alongside. The offshore wind opportunity is related to forthcoming plans for an offshore wind farm to the west of Orkney which would be operated and maintained from this location.</p> <p>Lyness has been considered as a possible location for creating a deep-water quayside to serve similar markets and indeed this location has been considered for decommissioning in the past.</p>

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		<p>There are a number of key reasons why Lyness is not suitable and reference has been made to this in the masterplan.</p>
<p>Individuals / Orkney residents</p>	<p>Overall the document tells me much in terms of what it will do for Orkney Harbours, in terms of increased revenue etc, but nothing about the wider picture: what will it do for the community who live here. So far my reading is that harbours wish to increase tourist numbers, turn Orkney into an industrial processing yard for the oil industry, and destroy an untouched stretch of the coastline for a new deep water terminal. How does that improve life for local residents?</p>	<p>The Masterplan does not support or promote a major increase in the number of cruise calls and passengers – rather the focus is on reducing the conflicts between cruise and other harbour-related activity.</p> <p>Investment in harbour infrastructure will enable Orkney to harness considerable benefit in terms of economic activity, jobs, population retention and upskilling not only in oil and gas, but other key sectors such as offshore wind. The masterplan demonstrates significant socio-economic and community benefit.</p> <p>The Masterplan Proposals are being taking forward through a process of sound environmental stewardship and through a robust environmental assessment process to mitigate significant adverse effects on environmental receptors.</p> <p>The Masterplan has been updated with some context around port operations and the rationale for investment. This includes a qualitative summary of the potential benefits arising from each proposal.</p>
<p>Individuals / Orkney residents</p>	<p>Flotta terminal is winding down, given both national and international commitments to phase out fossil fuels progressively to totally over the next 2-3 decades and major players such as the Rockefeller and Norway Sovereign Wealth Fund divesting from oil and gas it raises a question of significant risk to the investment of substantial public funds in a project whose main profits are predicated on a rapidly declining industry. It is notable that issues of risk are not addressed in the plan which focuses exclusively on some opportunities. This would seem to be a major shortcoming.</p>	<p>The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.</p> <p>Work is underway to explore possible options for the repurposing of Flotta Terminal: the masterplan has been updated to reflect this also.</p>
<p>Individuals / Orkney residents</p>	<p>Because of the way that Orkney Harbours Income is ring fenced, and it being a public body, it would seem reasonable that it undertook to mitigate the environmental impacts it was responsible for directly contributing to, and it already has the health and safety of its employees to consider. Given the significant expansion in cruise ships visiting, their associated pollution and consequent issues for respiratory health of staff and public one priority might be to mitigate this. As a fundamental part of expansion in berthing, mandatory use of shore power and contribution to provide for charging for electric bus and car transport for passengers round the island would seem good for the health and image of all concerned. This would also help redress the potential for a developing financial inequity, as the share of Harbours income to OIC strategic reserve from the oil port dwindles yet its costs supporting the cruise ship tourist infrastructure expand.</p>	

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Individuals / Orkney residents	Since the report was commissioned a climate emergency has been recognised locally, nationally and internationally with commitments to the Paris climate accord. There would seem good reasons to consider addressing immediate local needs, e.g. Scapa pier and fuel supplies for Orkney, and optimum management of cruise ship needs, infrastructure and pollution primarily. This could be addressed with existing funds.	
Individuals / Orkney residents	Regarding the justifications for doubling the size of Kirkwall Marina. Largely this is predicated on the increase in visiting yachts. I would suggest that yachts visiting the Orkney Archipelago are largely not just on passage and wish to cruise the area. Likewise to encourage the tourist economy, and the viability of other island communities, solely spending the development resources on Kirkwall would seem both inequitable and counter-productive. Stromness marina funding was not mentioned, and opportunities to develop pontoon facilities at sites such as Lyness, Longhope, Stronsay, other of the Northern Isles, or expansion of visitor moorings was not mentioned. This seems a significant missed opportunity necessary to optimum benefit from any marina development.	With regard to marine leisure and the ‘sailing offer’ in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.
Individuals / Orkney residents	My own belief is that Harbours as a public body should have a conservative approach to risk in investment, and ethical, health and environmental issues should be balanced with economic ones. In these respects the Masterplan is deficient, being more in the style of a corporate sector promotional vision than a balanced consideration of deploying public assets to best effect.	A clearer explanation of how Orkney Harbours operates is provided in the masterplan, along with cognisance of environmental aspects. It should also be noted that a detailed Environmental Impact Assessment would be undertaken for each project, which would consider some of the aspects you refer to, particularly the risks around the environmental impact.
Individuals / Orkney residents	Regarding aquaculture, there are a number of unknowns as to the future of the industry. It is vulnerable to market forces. Returns may prove land-based systems meet environmental regulation and resource costs more effectively. Also locally they may become vulnerable to catastrophic failure contributed to by climate change and eutrophication causing algal blooms. The expansion in jobs growth seems fanciful in the face of the remote control and robotic technologies being deployed. These risks are not considered, again solely opportunities.	There are risks associated with opportunities and developments in each sector. The Outline Business Case considers three scenarios for the assessment of economic benefits, which takes into account such risks: Base, Optimistic and Pessimistic Cases are presented for economic and financial benefits. A more detailed risk assessment will be included for each proposal also.
Individuals / Orkney residents	Detailed Paper on Sailing Tourism in Scotland and Orkney.	Many thanks for this informative paper, which, if acceptable to the stakeholder, provides important information and data that can be utilised during the development of Phase 2 and the development of a wider strategy for sailing in Orkney.
Individuals / Orkney residents	I am in strong agreement with what has been put forward as regards the heading of Kirkwall Pier.	Noted.

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Individuals / Orkney residents	Scapa Pier: to avoid substantial damage to the ecosystem which includes dredging other alternatives need to be considered in deeper water such as loading buoys, single point mooring or dolphins with a central platform. The former pair may produce difficulties as regards handling multiple grades. The dolphins with a central platform would not have this problem but may need to connect to the pier using a catwalk.	The Scapa Pier project is not of a scale that would involve the type of vessels that would use loading buoys or dolphins. Furthermore, buoys require the provision of undersea pipelines.
Individuals / Orkney residents	Scapa Pier: projected plan does show small craft berthed on the outer side of the projected pier and thus exposed to the long fetch across Scapa Flow.	Noted. All vessels will berth where appropriate depending on weather conditions. The Scapa Pier proposals increase options for sheltered berthing compared with the current situation.
Individuals / Orkney residents	Scapa Pier: the plan does not indicate the need for reclaimed land and due to its distance from Kirkwall and various facilities, although there is a toilet, there is no apparent need for regular berthing of tourist craft and possibly fishing boats. Yacht skippers often prefer to anchor where a beach or other attraction may be reached by dinghy as this is all part of the holiday.	There is a requirement for some laydown area and parking at Scapa Pier, hence reclamation is included in this proposal. There is a lack of suitable berths for boats providing marine tours – the berths provided here are intended for that purpose though could be used by other small craft. The text has been amended to make this clearer.
Individuals / Orkney residents	Do the tugs and pilot boat have to be stationed at Scapa? Wouldn't being stationed in Flotta cut down on the fuel bill or would this increase crew costs?	Given the current manning rota having vessels stationed in Flotta would not be viable on account of fuel and crew costs. It is also the case that serving Flotta is only a proportion of the work carried out by tugs and pilot boats.
Individuals / Orkney residents	<p>Scapa Deep Water Quay: possibly an ecological disaster. What is the return on capital? As this is a 20-year plan would all the costs be recovered in this time? There are already other places offering deep water berths such as in Norway and the Cromarty Firth would you be able to undercut them and still make a profit? Is the intention to offer the facility to an outside firm and charge them for it? (The Scottish Government are intending to nationalise Fergusons does this mean that the State or Local Government if it comes to that have the ability to run things better than a private company). Can you get intentions to use prior to committing to build (Scottish and Southern Electricity Networks are very good at that)? Is there a resale possibility?</p> <p>Scapa Deep Water Quay: has any intention been considered for a floating facility? A barge or vessel with heavy lift facility could be berthed in water of the required depth. A reversal of what would normally be carried out with deep draught vessels or rigs being brought to it rather than the other way around. The facility would be serviced by small craft which in the case of heavy supplies would also happen on a shore based jetty. By using this type of facility should employment not be regular it could always be leased out and hence produce some income. The big attraction of using a barge or vessel is that it can always be moved, owned, leased in or out and if owned have a sale value. It should also have the ability to run on shore power.</p>	<p>Scapa Deep Water Quay will enable Orkney to capitalise on offshore wind farm activity in close proximity, thus promoting renewable energy developments and benefiting businesses and residents within Orkney. This infrastructure also gives Scotland a competitive edge against Norway and other countries, given the proposed depth of water alongside which is substantially greater, even compared with Cromarty Firth.</p> <p>An Outline Business Case is underway which will ascertain the economic and financial benefits associated with this proposal.</p> <p>As part of the feasibility stage a detailed Environmental Impact Assessment will be undertaken which will determine the extent of environmental impact.</p> <p>The nature of how this infrastructure will be managed and operated will be considered in the Outline Business Case. Discussions are underway with companies across a range of sectors that are interested in utilising this infrastructure.</p> <p>The engineer assessment concluded that a floating facility is not a suitable alternative. For offshore wind and other activities laydown</p>

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		<p>area of at least 5 hectares is required, with straightforward access to and from the quayside.</p> <p>We will discuss your comments further with our engineers and should any alternative options deliver the same benefits and outcomes as the proposals currently within the masterplan they will be given consideration during feasibility stage.</p>
<p>Individuals / Orkney residents</p>	<p>The draft plan states that “There is a lack in appropriate infrastructure and facilities to accommodate existing and future operational activity” and “The plan for Stromness is focussed on improving the flexibility and usability of existing infrastructure, as well as creating capacity and facilities to enable growth in all sectors for the future.” To correct the above problems a higher footfall is required in the historic core. This cannot be done to any great extent by the current inhabitants but must come from a large increase in the number of visitors. To do this the Pole Star pier needs to be adapted for use by the explorer type cruise ships. The ex-Northern Lighthouse Board building also needs to be upgraded to possibly a multifunction museum something on the lines of the one in Lerwick but covering just Stromness and boat museum.</p>	<p>The creation of a museum is an excellent idea; however this does not fall within the remit of Orkney Harbours.</p> <p>With regard to the development of Pole Star Quay as a landing berth for small cruise liners the main issue is access to and from this location for busses. Smaller cruise liners can already berth at North Pier thus in our view there is no requirement for an additional berth. It should be noted that a cruise tender pontoon is now included in the masterplan, which will provide a more attractive opportunity for cruise liners at anchor.</p>
<p>Individuals / Orkney residents</p>	<p>Draft Plan also states “Whilst the construction of Copland’s Dock has enabled some operations to be moved out of the town centre, there remains issues of capacity, conflict of use and traffic and the flexibility of Copland’s Dock to cater for different types of vessel, particularly small boats. If Copland’s Dock could do this, there would be significant opportunity to remove heavy traffic from the historic town centre.</p>	<p>Noted.</p>
<p>Individuals / Orkney residents</p>	<p>There also needs to be a slip with haul out capacity for work, dive and fishing boats. Marine Engineering companies should be encouraged to set up haul out facilities and repair shops.</p>	<p>Throughout the development of the masterplan stakeholders have expressed the desire for additional boat repair/maintenance facilities in Orkney. At present a site is identified at Hatston, though the nature of this facility has not been defined in detail – it could serve the marine leisure market or it could be more focussed on fishing boats, or larger, commercial vessels – any such facility would need to attract a private sector operator.</p>
<p>Individuals / Orkney residents</p>	<p>Lyness: for any ship to be dry docked or have any considerable work done they need to be gas freed, tank cleaned, decontaminated and proved to be in a fit state to have the necessary work done. Lyness due to its position as regards the North Sea and the Atlantic oil fields is in an ideal place for the above operations. The Golden Wharf would need to be extended out to the 15m contour along its length. Onshore a holding tank for the effluent would be required whose contents would be pumped over to Flotta into the de-ballast treatment system. In time general engineering works could be set up to cover all work other than the under water hull plus there would be work associated with renewables.</p>	<p>Lyness was considered in the development of proposals; due to a number of factors it was not considered as the optimal location to create a deep-water quayside.</p>

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	<p>The establishment could be powered from the proposed Scottish and Southern Electricity Networks sub-station at Rinnigill. If the floating deep water barge was to be stationed to the North of Switha this could also be powered from the same sub station.</p>	
<p>Individuals / Orkney residents</p>	<p>With a programme that is looking 20 to 30 years ahead I am surprised that there is no mention of an increase in sea water levels. I would have expected to see some mention of how the considerable amount of assets would be protected or have some form of mitigation.</p> <p>I realise that this is mainly a question for OIC as a whole but isn't Harbours the marine side of OIC? Kirkwall town has already seen protection installed but the harbour, itself, has been left to stand on its own. Protection of Stromness harbour would automatically protect the town and this is probably one of the simplest to do.</p>	<p>The Flood Risk Management Strategy for Orkney is produced by SEPA and sets out the vision for how flooding should be managed. It identifies the main flood hazards and impacts, together with the setting of objectives to manage these impacts and a series of prioritised selected actions that aim to achieve these objectives.</p> <p>The Local Flood Risk Management Plan for Orkney, produced by the Council as lead authority, takes forward the actions set out in the Strategy and identifies what works or actions are to be undertaken locally during the period 2016-2022 and how these are to be funded.</p> <p>Reference is made to sea levels and flood risk in the masterplan.</p>
<p>Individuals / Orkney residents</p>	<p>Undercover and outside storage, the abilities to repair and maintain hulls, engines, equipment and rigging plus sail making and repairs are essential facilities. Initially it does not have to be a large capital investment as minimal facilities already exist and this type of work has been carried out over the years. The satisfactory completion of this could achieve business opportunities and extra employment.</p>	<p>With regard to marine leisure and the 'sailing offer' in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.</p>
<p>Individuals / Orkney residents</p>	<p>In all the islands surveys should be conducted to ascertain the amount of berths required whether alongside, at pontoons or visitors moorings. The questionnaire would also try to establish how having these facilities would their general wellbeing and businesses be helped.</p>	
<p>Individuals / Orkney residents</p>	<p>Orkney needs to build up its capabilities to meet future demand as a marine tourist hub. Due to the perspicacity and effort of Orkney sailors a good start has been made with Orkney Islands Council financing the building of three marinas. Orkney Marinas Ltd as the management body have done an excellent job in advertising at various events resulting in a huge increase in visiting yachts. We now need to keep some of these visiting craft here through the winter months and improve "sail to and Sail through" by providing winter storage and improving our various attractions and methods of access especially in the individual islands.</p>	
<p>Individuals / Orkney residents</p>	<p>The Orkney Harbours draft Plan generally meets up with future requirements as regards development in Kirkwall. However I do not see a case for a development at Scapa as regards marine tourism as it would tend to detract from Kirkwall and has no benefits other than as an anchorage. It is more important that development for marine tourism should be as mentioned in 3.2.</p>	<p>There is a lack of suitable berths for boats providing marine tours – the berths at Scapa Pier are intended for this purpose though could also be used by other small craft. The masterplan has been updated to make this clearer.</p>

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Individuals / Orkney residents	At present Orkney is almost at the end of the physical trail for marine tourism in Scotland. We need to be more in the middle to establish the 'Sail Through' and get the 'Sail To' but with the possibility of carrying on in other directions of the compass. We need to show that we can supply a service and hence get owners to leave their beloved craft here through the winter months knowing that they will be cared for.	With regard to marine leisure and the 'sailing offer' in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.
Individuals / Orkney residents	With all the piers and berths that have been created over the last few years are we able to accept the Tall Ships? If not enough berths what is the possibilities of anchoring either in Kirkwall Bay or at Scapa? There should also be Tall Ships allocated to the various islands that are able to accept them with local communities providing a programme.	The Tall Ships can be accommodated in and around Orkney.
Individuals / Orkney residents	With time Scapa Flow wrecks may become too dangerous for recreational diving. As this is a very important part of marine tourism here in Orkney some decisions will have to be made concerning the future. Should certain parts be removed and put on display at Lyness? Should other ships be sunk to replace them?	The Scapa Flow wrecks, and other associated historic assets, have been identified by Historic Environment Scotland/Marine Scotland as part of a proposed Scapa Flow Historic Marine Protected Area. It is proposed that a management plan be prepared to address the future management of these deteriorating assets and guidance regarding any potential removal of artefacts in accordance with the appropriate legal, policy and licensing requirements.
Burray Community Association	We note the economic and social objectives of Highlands and Islands Enterprise and the Orkney Council Plan referred to in the Harbours Masterplan. We are also aware of the increasing demand in Orkney for marina style berthing for leisure craft visiting from UK, Scandinavia and from local boat owners.	With regard to marine leisure and the 'sailing offer' in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.
Burray Community Association	It is the view of the BCA that a leisure pontoon marina facility would be of considerable benefit to the community. Furthermore, having additional marina berths located at Burray village would, we anticipate, improve the attractiveness and accessibility of Scapa Flow and the South Isles as a leisure destination. Burray Village is on the main bus route, has a shop, a restaurant and pub, nearby tourist attractions, a sheltered anchorage and an established boatyard. These points make the village an excellent location for a marina. We would welcome the opportunity to explore how this idea could be incorporated in the Harbours Masterplan to the benefit of all concerned.	
Orkney Historical Boat Society (OHBS)	OHBS have appointed Reiach and Hall, Edinburgh to design a boat haven to be built at Coplands' Dock, Stromness. This is the site of a 19th Century boatyard and is the plot surrounded by the old stone walls, immediately North of the new Copland's Dock pier and West of the harbour operational area. We have already consulted the OIC Planners who have agreed to this development in principal. We have advised OIC	Noted. We look forward to working with OHBS to deliver this project.

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
	<p>of the architects appointment and have a meeting scheduled next month with Gavin Barr, head of Infrastructure and Development, to agree the best strategy going forward. We are at the stage of needing to come to an agreement with OIC on how much land from the field immediately to the N of Copland's Dock will be available for a public car park so as to separate visitors parking/access from the access of boats to the haven via an approach closer to the new Copland's Pier.</p>	
Rousay Sailing Club	<p>The RSC is pleased to see marine developments foregrounded in this way as they are clearly key to social and economic developments on the islands. We would however note that Harbours in the North Isles including Rousay have been excluded from consideration in the current exercise.</p> <p>The focus of these plans appears to be improving and developing existing mainland facilities. It appears to lack boldness and vision for innovation and a future Orkney including all the small communities which make this archipelago so attractive to the many visitors on which our economy increasingly depends.</p>	<p>Thank you for your detailed response and your plans for developing a marina on Rousay. All comments and proposals will be taken on board as we soon progress onto Phase 2 of the masterplan.</p> <p>With regard to marine leisure and the 'sailing offer' in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.</p>
Rousay Sailing Club	<p>Awakening the Giant Marine Tourism Strategy lays out ambitious plans to capitalise on the potential of marine leisure in the whole of Scotland. The extent and scope of development in the current Orkney Harbours Master Plan seems to fall short of the vision given in the Scottish Marine Tourism Strategy.</p>	
Rousay Sailing Club	<p>It is in the nature of Harbours to thrive as part of a network of activities connecting with other harbours. It is suggested that an additional marina will make Orkney overall a more interesting destination for visiting yachts. A provision in Rousay would develop a node in the network of marinas connecting North and West, a particular support to both Stromness and Kirkwall.</p>	
Rousay Sailing Club	<p>The north isles risk being increasingly disadvantaged both socially and economically. Including a more comprehensive response to the Scottish Tourism Strategy in the Orkney Harbours strategy would seem an effective way to mitigate deprivation of the smaller communities like Rousay. It appears that the current phasing of the Master Plan works against current OIC policies in further delaying any mitigation of the current situation, it further misses a huge opportunity to be part of an existing national strategy with considerable government backing.</p> <p>The historic lack of intent by Orkney Harbours to invest in small island communities as given in strategic case Section 2 – is particularly prominent in Rousay, where no Harbours investment has been made since the building of the ferry ramps and breakwater more than 30 years ago.</p>	
Rousay Sailing Club	<p>We agree that some harbours are struggling to efficiently accommodate multiple users, but the situation in Rousay is critical as there is effectively no harbour, simply a potentially hazardous landing place for our ageing ferry.</p>	Noted.
Rousay Sailing Club	<p>The development of 'Enhancing Scapa Pier for Marine Tourism' is unlikely to attract any marine tourism, and as a tourism investment risks complete failure since it is at least 3 to 4 sailing hours off any network route. It appears to be a purely industrial development.</p>	<p>The development at Scapa Pier is mostly industrial; however the berths for small craft have been included at this location as a possible berthing point for marine tour providers, rather than for sailing craft.</p>

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
Rousay Sailing Club	The proposal to spend 65+ million GBP for a second Scapa Pier rather than a more modest investment in e.g. enhance further existing suitable harbours such as Lyness, would be taking an unnecessary substantial financial risk that by the time (2030) the facilities create a profitable return their reason for being will be substantially cut back by strategies to reduce carbon emissions. Hatston would seem to be more than adequate. However, strategies to capitalise on or support renewables should be developed instead thus reducing island dependence on hydrocarbon fuels.	Lyness was considered in the development of options; for many reasons it is not possible to develop Lyness (see Page 52). There are several reasons why Scapa Deep Water Quay is the preferred option with regard to harnessing Operation & Maintenance activity for offshore wind and servicing specific markets within oil and gas until such time that we have transitioned to a zero carbon economy. Scapa Deep Water Quay will meet the requirements of offshore wind sector and enable Orkney to develop as a hub in this sector.
Rousay Sailing Club	Workshops and discussions with harbour users and other stakeholders - to date, we have not been consulted. We appreciated that 'tailored stakeholder engagement' was/is/shall be undertaken in the creation of this plan and although not previously consulted, we hope that our response will be received positively, and further opportunities for engagement with our island communities, pursued.	It is envisaged that Phase 2 will commence in early 2020 and there will be planned visits to each island community. We look forward to engaging with you very soon and appreciate all information submitted as part of your response.
Destination Orkney	Page 3: Orkney Inter Isles Transport Study, and the associated Outline Business Case: would be good to know the timescale and recommendations from this study.	The Orkney Inter Isles Transport Study (OIITS) Outline Business Case is due to be completed by December 2019.
Destination Orkney	Page 12: visual amenity, poor accessibility and poor information for visitors travelling on ferries at Kirkwall: how will this be addressed?	As part of the reconfiguration of the quayside there will be better signage, improved traffic management and relocation of facilities to improve access to and from the ferries.
Destination Orkney	Page 14: through enhancing port infrastructure and developing the wider visitor experience whilst lessening the potential negative impacts locally: what is planned on developing the wider visitor experience?	There will be less requirement for vessels to anchor in the Bay which in turn improves the visitor experience for cruise passengers. There will also be less conflict between cruise and other harbour-related activities at Kirkwall and Hatston which will make the disembarkation and journey away from the pier more enjoyable.
Destination Orkney	Page 14: More opportunity to come alongside at Kirkwall will be attractive to cruise lines – additional infrastructure will reduce conflict between cruise and other operations and lower carbon fuelling opportunities could become an opportunity: Additional visitor management resource will be required here along with better sign-posting, however this would provide additional footfall through the street, which would also in turn require additional visitor management resource.	Signage and walkways from the vessel to the town would be incorporated into the reconfiguration of Kirkwall Pier. At the time of feasibility there would be liaison with Destination Orkney Strategic Partnership and relevant Council departments regarding additional visitor management resource.
Destination Orkney	Page 14: Significant uncertainty regarding external and internal ferry services in terms of vessels and service configuration: Concerns on standard of current fleet, capacity and accessibility issues, as well as the online booking facilities all of which need to be addressed in the near future, in order to encourage and support tourism growth in the islands.	The aspects mentioned here are being taken forward as part of the OIITS Outline Business Case.

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Destination Orkney	Page 14: Should the Road Equivalent Tariff (RET) be implemented there could be a significant impact in terms of traffic carried. How will this be managed through current harbour resource?	As and when RET is implemented it will be managed through harbour resources.
Destination Orkney	Page 14: Number of marine tours around Orkney is growing; at present there is no dedicated berth for such tours: better pier facilities would enhance the attractiveness of this tourism product. Yes, this would be welcomed.	Noted. The development of options considered that Scapa Pier could be a suitable location for a marine tour berth, given its proximity to Kirkwall and ability to serve Scapa Flow. With the addition of a cruise tender pontoon in Stromness now included in the masterplan, there may be opportunities for this in Stromness also.
Destination Orkney	Page 17: should also include Orkney Tourism Strategy 2019 – 2025 and Destination Management Plan 2019 – 2025.	Noted.
Destination Orkney	Page 17: Would also suggest that reference is made to the Destination Management Plan within the masterplan, as cruise liner activity, transportation, visitor management and marine activity will form part of this document.	Noted.
Destination Orkney	Page 23: fully support outline requirements G, H, M, O, P, Q, R	Noted.
Destination Orkney	Page 26: Kirkwall Pier – core proposals comprise new quayside infrastructure, a waterfront development area and marina expansion, as well as improvements to traffic management and facilities on the quayside: this is welcomed.	Noted.
Destination Orkney	Page 31L Hatston – in the future there may be a need to refurbish and/or extend the existing facility that caters for both ferry and cruise passengers: yes there is a need for this and this development would be welcomed.	Noted. We would welcome discussion with Destination Orkney regarding how this project might be taken forward and funded.
Destination Orkney	Page 26: Part of the area could be incorporated into the reconfiguration of the marshalling area or relocation of the travel centre....What travel centre does this relate to - the one at West Castle Street - or Orkney Ferries building?	The masterplan text provides a number of examples of what could be developed at Kirkwall Pier – the text has been amended so as not to suggest that there is a definitive plan to amalgamate travel centres (e.g. the Orkney Ferries building with the existing travel centre on West Castle Street) – rather it was illustrative in that it could be something that was taken forward. The actual layout of facilities and buildings on Kirkwall Pier will be determined at feasibility stage, guided by in-depth engagement with relevant stakeholders.
Destination Orkney	Page 34: Additional shoreside area and marine leisure berths: agree, this would create additional berths for visiting yachts and has the potential to develop marine tours.	Noted. The development of options considered that Scapa Pier could be a suitable location for a marine tour berth, given its proximity to Kirkwall. With the addition of a cruise tender pontoon

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		in Stromness now included in the masterplan, there may be opportunities for this in Stromness also.
Destination Orkney	Page 37: Stromness and Copland's Dock – reconfiguration of the marshalling area, relocation of marina facilities, waiting room facilities and signage: would this take business away from the town?	There is a masterplan proposal which aims to improve the shoreside area in Stromness; this should on the contrary enhance the town by making the marina facilities and pier area more attractive, as well as improving traffic management.
Destination Orkney	Page 45: Lyness – could the increased area also include marina area for visiting yachts?	With regard to marine leisure and the ‘sailing offer’ in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.
Offshore wind developer (confidential)	Offshore wind construction vessels are large; during construction these vessels would travel to and from a deep-water port, requiring a minimum draft of around 14m at the quayside. The likelihood is that large, slow moving construction vessels would not transit through the Pentland Firth against the tide, in restricted visibility or adverse weather but transit around the North of Orkney. Clearly a deep-water staging port on Orkney would significantly reduce transit times and maximise the weather window for construction.	Noted. We understand that Orkney has an opportunity here to be active in the development of offshore wind.
Offshore wind developer (confidential)	Lyness Pier was initially considered; however the steep seabed slope at the quayside prohibits the use of jack-up vessels and the 5m - 8m draft is too shallow. We understand that Lyness Pier is listed which would complicate any efforts to make this site fit-for-purpose. A new, purpose built deep-water quay in the natural shelter of Scapa Flow would service the growing offshore wind market in the North of Scotland and in doing so become a great asset to Orkney’s economy.	We concur with your views on Lyness Pier and the issues surrounding its potential development. An Outline Business Case is currently being developed which will assess the financial and economic benefits associated with all proposed developments including opportunities to provide harbour infrastructure for the offshore wind sector.
Offshore wind developer (confidential)	5 hectares of laydown area is considered an absolute minimum (Scapa Deep Water Quay). The larger the laydown area the greater the flexibility.	Noted. We will consider whether or not it is possible to create additional laydown area (phased) at feasibility stage.
Offshore wind developer (confidential)	Scapa Deep Water Quay layout: a simpler square/rectangular shape with reinforced quaysides would be preferable for offshore wind.	Noted. We would seek to engage with potential users prior to feasibility, with a view to designing the infrastructure appropriately.

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Scottish Sea Farms (SSF)	Aquaculture – lack of welfare facilities for staff at Tingwall and Houton piers.	Noted. Proposals for Tingwall and Houton will be considered in Phase 2.
SSF	Aquaculture – lack of facilities for carrying out repairs and maintenance on barges and larger vessels.	There are proposals for a boat repair facility at Hatston, which could provide such services for the aquaculture industry.
SSF	Lack of facilities for the construction and repair of fish farm pens.	We would welcome discussion with Scottish Sea Farms to identify a suitable location.
SSF	Berthing space at Kirkwall is an issue and enhancements here are welcomed.	Noted.
SSF	Lack of maintenance of the Eday pier has been an ongoing concern, the fendering needs improved and the ladders replaced.	This issue will be addressed in Phase 2, which is due to commence early in 2020.
SSF	Kirkwall Pier is very important to SFF. We have an office plus storage yard and a feed store. There is mention of demolishing some existing buildings but no detail on what will replace them. SSF will always require feed storage and office facilities at this location.	The reconfiguration of Kirkwall Pier, including the possible demolition and/or relocation of facilities will only be done in consultation with existing users. There may be an opportunity for SSF to have improved facilities in the future, or it may be that your existing facilities remain where they are.
SSF	Scapa Pier: SSF would welcome any extension to this pier, and as such access and a berth for our site vessels would be required.	Noted.
SSF	Whilst SSF are not averse to the idea of a new deep-water facility in Scapa Flow we do have significant concerns over the construction and operation of deep-water quay proposal at Scapa. The location proposed is just 1.5km north of our existing Westerbister farm which would be very sensitive to potential changes in water quality and noise levels during construction. Given the scale of quay and land reclamation required these effects could be significant and may be difficult to manage. In terms of risk during the operation of the proposed quay we have concerns over potential pollution, noise levels from maintenance of rigs, and the potential introduction of invasive non-native marine species.	There will be a detailed EIA at project level, given the very nature and location of the proposal and this will certainly consider in detail potential impacts on SSF business activity in close proximity. It is envisaged that there will be close consultation and communication with SSF during this process. With regard to construction, your comments regarding potential impacts and whether these can be mitigated or not will be taken on board and we will work with you to develop an agreeable construction method and plan that will mitigate impacts as far as possible.
SSF	While impact on water quality from construction and invasive species from operation were listed in the SEA we feel that they require greater consideration in relation to effects on other industries and should be listed as 'potential impacts' for relevant proposals in Appendix B.	
SSF	Based on recent experience of construction and operational issues, we feel that actions which improved or would have improved potential consideration and management of potential risks include: early discussion on construction methods, timing and mitigation proposals, sharing of method statements and risk assessments, undertaking of the relevant environmental studies, and all of these aspects being agreed under a specific Management agreement between ourselves and operators/construction company.	

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SSF	Following a recent meeting, SSF understand that these principles do not apply to ongoing operations but would apply to any changes or expansion of sites. SSF request that this is made explicitly clear in Appendix C.	Noted. It should be noted that these Policy Principles are not intended to affect any existing operations, such as aquaculture sites already present in Scapa Flow; they will however apply to any such new sites or extensions to existing sites.
SSF	SSF are concerned that the principles will remove any potential to expand Hunda or Westerbister in the future. We would wish to see any such proposal considered on its own merits, with the economic benefits considered alongside any potential for impacts on harbour interests when determining whether the proposal meets planning policy.	<p>Fish farm development proposals in Orkney, including the expansion of existing sites, will be assessed against Orkney Local Development Plan (OLDP) Policy 12 - Coastal Development: Aquaculture and Supplementary Guidance: Aquaculture, Development Criteria 1-10.</p> <p>OLDP Policy 12 states that proposals for finfish and shellfish farming developments (including the expansion of existing sites) should maximise opportunities to deliver social and economic benefits for local communities, and that significant consideration will be given to the assessment of social and economic impacts associated with a development proposal.</p> <p>The Development Criteria 8: Other Marine Users states that proposals for new aquaculture development and extensions to existing aquaculture development should have due regard to other marine users including Port and Harbour Area operations (including STS operations). The supporting policy guidance states that development that would have a significant adverse impact on Harbour Area operations and/or navigational safety will not be supported by the planning authority.</p> <p>In light of the strategically important harbour infrastructure proposals within Orkney Harbour Master Plan (Phase 1), the Proposed Development Policy Principles have been prepared to provide greater clarity to other users of Scapa Flow when the planning authority assesses the impact of development proposals on Harbour Area operations and/or navigational safety.</p>
SSF	Policy Principle 3 seeks to safeguard strategic navigational channels for all vessels entering and exiting Scapa Flow. SSF feel that the use of the word 'impede' is not appropriate as it could be interpreted as both a complete obstruction of navigation or hindering navigation, the latter not necessarily equating to a significant adverse effect.	Noted.

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Sheila Fleet	For our business in Kirkwall on Bridge Street, in recent years since the change of the drop off point of passengers to the new travel centre there has been a drop in sales. This is recovering, but the ability to attract small to medium size cruise liners is good as they are more affluent and in many cases spend more. It's a misconception that all cruise liners spend money on the street. I can see our new development here at the Kirk Gallery and Café being able to accommodate smaller private tours from these smaller ships as part of a new excursion, maybe based around retail or shopping but this is something to discuss with the Shore Ex operators if this was to come to fruition.	Noted. As and when the proposals for Kirkwall Pier enhancements move forward we would envisage working closely with key stakeholders such as Destination Orkney and Council departments.
Sheila Fleet	With the extension of the Kirkwall Pier and developments, I see this as a positive investment and can see benefits. Would passengers be bussed to the travel centre from here or would they walk down Bridge Street? I know there are many questions, but in principal we would support this development and wish to be kept involved with the process as it is debated in the council by members.	The whole management of cruise passengers on shore is something that would be considered during the feasibility and environmental assessment stages. We aim to keep stakeholders up to date with how proposals develop over the next few years.
Triton Marine	The Scapa deep water development, this is only suitable for the proposed uses and not for further development where heavy lift may be required, there is a large lay down area shore side for light structures, wind turbines etc but not suitable for heavy lifts like 1200t tops sides etc for decommissioning. The T piece of the quayside is not robust enough for heavy lifts either and needs to be wider than 30m to allow the topsides etc to be moved on a crawler system to a laydown area.	The design of the Deep Water Quay is at present conceptual and high level, based on the requirements of particular markets (e.g. offshore wind and rig maintenance alongside). The design could change if and when the proposals move to feasibility stage at which point the level of the decommissioning opportunity in Orkney will be better understood. In which case, the design could incorporate heavy lift areas, as well as a wider central area for moving equipment from the quayside to the laydown area.
Triton Marine	Lyness option is good but to allow deeper draft vessel to use the facility then the jetty front would need to be extended into deeper water and extended further North to allow for dual usage.	Lyness was considered in the development of proposals; due to a number of factors it was not considered as the optimal location to create a deep-water quayside.
Triton Marine	I believe there is also ongoing discussions with the Ministry of Defence (MOD) regarding the oil contamination at Lyness and who has responsibility for the clean-up. Has a cost been indicated for this?	An indicative cost to remediate is available and that will be part of the ongoing discussion with the MOD.
Triton Marine	I have had previous dialog with Orkney Harbours regarding the potential for Decommissioning in Scapa flow and I will be having further meetings in the near future.	Orkney Harbour Authority would be very keen to attract decommissioning activity to Orkney, and have had discussions previously with players in the market. The recent study conducted by EY suggested that decommissioning would not be a real market opportunity for Orkney until the West of Shetland assets were at the end of their life; however, should a company operating in the market bring forward a concrete opportunity, then Orkney Harbour Authority would be interested in discussing infrastructure requirements.

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European Marine Energy Centre (EMEC)	Shoreside power should now be a standard offering. Whether from electrical connections or through hydrogen to electricity. They should not be retrofitted but provided as standard. This may require large batteries or other storage mechanisms so they should be factored into plans as the energy potential of the units may require the area to be classified for its explosive/fire risk.	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
EMEC	Climate change will bite during the period of the planning horizon. If it does then it would make sense to be ready for it through the consideration of how this will affect harbours and specifically any works planned. Personally I feel we may need to abandon the existing harbour area in Stromness and build a dyke across from Copland's to the Ness and move the ferry berthing to the sea-ward side if sea-level rises are more than a metre or so. The alternative is that much of old Stromness will become uninhabitable. So whilst radical, I feel you ought to at least understand how sea-level rise of several metres will affect your assets and enable or obstruct other activity.	
EMEC	Opening up of the Northern Maritime Route. We will see ships coming in from a different direction and acting as Willie indicated happens at Falmouth. i.e. last chance to stock up before the journey. That will require bunkering capacity here for whichever is the fuel of choice. The fact that ships on that route will be newer will probably mean newer fuels. We need to be ready for both fossil LNG, but also H2 and its derivatives. The market will decide which will win out, but we should not just pin our hopes on LNG due to its polluting nature in a net zero carbon world.	
EMEC	The omission of Flotta from the plan leaves too many questions and should be corrected/clarified. Flotta represents Orkney's marine future beyond dirty fossil fuels and Orkney should express its interest in maximising that in the light of its self-declared Climate Emergency.	
Extinction Rebellion	Extinction Rebellion (XR) Orkney is concerned that the Harbours Draft Master plan does not include any measures to achieve the cuts in greenhouse gas emissions that have been committed to by the Scottish and UK Governments. Without a clear strategy to reduce emissions from Harbours activities the plan is not fit for purpose.	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
Extinction Rebellion	The Climate Change (Emission Reduction Targets) (Scotland) Bill, that is currently at committee stage in the Scottish Parliament, is set to legally commit Scotland to reduce its greenhouse gas emissions to net zero by 2045. This is five years earlier than the legally binding commitment by the UK Government to achieve net zero by 2050. Reflecting the short timescales on which emissions must be dramatically cut at all levels of society, Orkney Islands Council itself recently declared a Climate Emergency. However, the Harbours Draft Master Plan does not present any strategy or master plan to reduce the emissions associated with Harbours activities. This represents a missed opportunity to build on Orkney's reputation for innovation in this area and for Harbours to provide leadership on this issue. It also means that once the new emissions reduction targets are incorporated into Scottish law, the obligations that will follow on councils to reduce emissions across all areas of their responsibility will render the Draft Master Plan out of date.	

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Extinction Rebellion	The central aim of the Draft Master Plan is to ensure that Harbours has the infrastructure to maximise revenue from future oil and gas activities. While it is recognised that such activities play an important role in the Orkney economy, in the context of the ambitious legally binding emission reduction targets set by the Scottish and UK Governments, any strategic plan produced by the council must have the rapid reduction of greenhouse gas emissions at its core. Not recognising this risks investing in stranded assets which will not generate the expected revenue in the net zero greenhouse gas emissions economy of 2045.	
Extinction Rebellion	Reducing greenhouse gas emissions is something that Orkney is good at. Orkney is currently at the cutting edge of research into the use of hydrogen to power inter-isles ferries and to use battery power to provide clean shore power to larger vessels. This builds upon Orkney's strong capabilities in marine renewable energy. XR Orkney believes that it is projects like these that should form the core of the Draft Master Plan. For example, a strategic aim should be to build the infrastructure to make clean shore power available at all harbour facilities, and if fuel bunkering is to be proposed it should be to encourage and enable the use of low emissions fuels.	
Extinction Rebellion	The cruise line industry is another area where Orkney can build on its reputation for innovation and take a leadership role in reducing emissions. Orkney should impose minimum emissions standards on the cruise ships visiting our waters. When cruise ships dock at our shores they should be obliged to use our clean and abundant renewable energy to power their vessels. XR Orkney recognises that building a low emissions fuel infrastructure involves engineering challenges, but that is exactly why it needs to be considered in the Draft Master Plan.	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
Extinction Rebellion	OIC should be applauded for their recognition of the Climate Emergency and their pledge to act to tackle it. The Draft Harbours Master Plan is the first major opportunity for the OIC to demonstrate that they intend to act on this pledge. Without a clear strategy to dramatically reduce emissions from harbours activities, and to ensure that future sources of revenue are aligned with a net zero emissions economy of 2045, the Draft Harbours Master Plan is not fit for purpose.	
Orkney Renewable Energy Forum	All vessels when in port need to be connected to shore supplied renewable energy, or to be burning carbon free hydrogen or synthetic liquid fuels. In terms of efficiency shore connections are by far the most efficient, with hydrogen in the middle and synthetic liquid fuels being the worst and only expected to be used for vessels either already constructed or which will be constructed over the next two years at the most.	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
Orkney Renewable Energy Forum	All vessels which require refuelling need to be supplied with either electricity to charge batteries, hydrogen or with synthetic liquid fuels. Orkney is well placed to supply the first two directly and may need to source the third from other sources in limited quantities. We do not see liquified natural gas as a long-term solution but welcome the plan to include ship based bunkering facilities for LNG for those ships currently under construction and which might be constructed over the next 5 to 10 years before hydrogen takes over as the fuel of choice for large ships.	

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Orkney Renewable Energy Forum	The masterplan covers major port infrastructure, but it also ought to consider operations, including those vessels used directly or under contract to manage the harbours. Both pilot boats and tugs will over time need to be replaced and the master plan ought to include a commitment that these will be powered by batteries, or hydrogen, or a hybrid between the two sources of energy as appropriate for the duties the particular vessels need to carry out. This could most effectively be expressed as a commitment to not purchase any diesel-powered vessel in the future.	
Orkney Renewable Energy Forum	In terms of physical extensions to the piers suggested in the master plan, OREF is happy that each of them could potentially provide a sound basis for investment by Orkney Harbours, provided that the plans are modified to include the relevant electricity connections and hydrogen supply equipment required to fuel all vessels expected in a net negative greenhouse gas emissions future. From discussions at the public meetings it was clear that the need to build infrastructure to cope with increased sea levels was understood. However its not clear that the plans are integrated with flood defence planning for future sea level rises, particularly at Kirkwall and Stromness where access to current infrastructure could be cut off by future flood prevention schemes.	
Orkney Renewable Energy Forum	We support the plans to provide over the near to medium term liquefied natural gas bunkering facilities where they make commercial sense to refuel the currently under construction fleet of LNG cruise ships as this will significantly reduce the particulate emissions from these important elements of Orkney Harbours operations. However, LNG does not provide a significant improvement in terms of greenhouse gas emissions, we believe that a target should be set to offer equivalent hydrogen fuelling options to encourage future cruise ships to operate with hydrogen rather than LNG at Hatston. This date should be no later than 2030 with fuelling for smaller vessels being available at a much earlier date at Hatston or Kirkwall, Stromness, Scapa and if constructed at the deep-water port on the east side of Scapa Flow.	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy.
Orkney Renewable Energy Forum	Additional space at Hatston is needed in order to ensure enough space is available for future developments in renewables in and around the north of Orkney. Making the additional space available for these developments at Hatston, along with other uses could be considered as worthwhile and OREF would support this development on a more speculative basis than other developments, to enable and encourage the future development of marine energy in and around Orkneys northern isles. There is likely to be a surge in demand for space for marine renewables at the time the Orkney Grid reinforcement project comes to fruition. This is expected to be around 2024 and at least some of the additional space proposed at Hatston ought to be available by 2024 in order to allow these marine developments to go ahead.	Noted. The proposal for Hatston indicates that space could easily be earmarked for future renewable energy developments. As and when this proposal moves forward further consideration will be given to this and other potential markets as they develop. It will be important to engage with organisations such as yours in order to monitor the development of renewable energy projects and the various requirements that come with this with regard to accommodating and handling devices, maintenance, etc.
Orkney Renewable Energy Forum	If a request is made to extend Scapa Pier to allow larger tankers to off load fuel this should be discouraged as liquid fuel use is expected to decline considerably as Orkney moves to a lower carbon future and the need for a larger pier for this purpose would soon disappear. The master plan at present suggests that this would be a non-optional decision based on a need to continue to supply liquid fuels by tanker. Synthetic liquid fuels for the use of older boats is potentially already catered for at Hatston and this could become a central hub for	The Masterplan has been updated to reflect the recent Climate Emergency declaration and revised carbon reduction targets for Scotland, along with a more detailed description of measures to support this policy. Orkney Harbours is focussed on supporting transition to a zero-carbon environment.

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
	<p>synthetic liquid fuel distribution to other locations both for marine use and for agriculture and road transport.</p>	<p>In the short to medium term Orkney is going to remain reliant on the delivery of fuels such as petrol, diesel and kerosene, though it is recognised that volumes of these fuels will decrease thereafter as new lower carbon fuels come on stream. Thus at present and for much of the lifetime of the masterplan there is a concrete need for the delivery of fuels and vessels supplying these fuels continue to grow in size. See Pages 11 – 17 of the final masterplan.</p> <p>It is also worth noting that piers and quays will still be required for the transshipment and bunkering of zero carbon fuels in the future and it is inevitable that tankers carrying lower carbon fuels such as LNG or even hydrogen are likely to be larger than the current tankers transport fuels today.</p> <p>The development at Scapa Pier is not intended just to support the delivery of fuel: it is the primary infrastructure that services Scapa Flow generally and is at capacity with regard to this.</p>
<p>Marine Scotland</p>	<p>There are a number of projects which have works below Mean High Water Springs that will require a marine licence. Applicants should contact Marine Scotland Licensing Operations Team (MS-LOT) to discuss the marine licensing requirements of specific projects which may also require screening under the Marine Works (Environmental Impact Assessment) (SCOTLAND) Regulations 2017.</p>	<p>Noted. As and when the proposals are taken forward we would seek to engage with Marine Scotland on a regular basis.</p>
<p>OIC Education Leisure and Housing</p>	<p>The element of the plan which would impact the Museums and Heritage Service most significantly are the plans for Lyness as the proposed storage area is close by the Museum. Our feeling, from looking at the plans, is that this would improve the area and would not have a negative impact on the Museum at all.</p>	<p>Noted.</p>
<p>Eday Community Council</p>	<p>Eday Community Council would like to express disappointment that Eday and other isle communities around Orkney have not been included in Phase 1 masterplan. Whilst we understand that there will be a Phase 2 taking place in coming months, it is nonetheless disappointing that yet again the isle communities are considered last.</p>	<p>Phase 2 will commence in early 2020 and there will be planned visits to each island community; all issues identified will be taken on board and dealt with during Phase 2.</p>
<p>Eday Community Council</p>	<p>Eday in particular, has pier infrastructure that is in very poor condition, as reported by the engineer from PBA who came to survey the infrastructure earlier this year. He expressed significant concern about the state of the fenders. The aquaculture company who utilises the infrastructure is almost at the point of refusing to use the pier on Eday given the safety implications that it brings. Should the aquaculture company move away from Eday this could be detrimental to what is a very fragile economy. It is practically impossible for any vessels including yachts to lie alongside given the lack of wave protection and issues with depth of water at the steps. The condition of the store, waiting room and toilets is incredibly poor.</p>	

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
Eday Community Council	Whilst there is some understanding that the revenue generating projects need to be in place first, so that there is money available to spend on those piers and harbours that do not generate money, there is a need for the Council as a whole to support the funding of these piers and harbours not as a marine asset but as a social, economic and community asset that is hugely important for the sustainability and viability of our island communities – and perhaps this should be a focus from Economic Development as well as Harbours.	
Eday Community Council	Eday Community Council would like to have some assurance that Phase 2 will happen and that piers and harbours around our smaller island communities are considered in earnest not just as harbour infrastructure but as the key economic and social assets that they are.	
Holm Community Council	Scapa Deep Water Quay: we do have a concern with the road access to the Scapa deep water port which is currently shown as a tee junction on a quite fast part of the main road to Holm, which does not have good visibility. Given the potential nature of traffic to the site, perhaps 50 car movements at shift changes during large maintenance operations, cranes and lorry's needed for delivery and removal of smaller items etc we think that the current junction shown is unacceptable and we would object to it if presented as a planned project.	Noted. No detailed plans for junctions and access roads have been developed so far – only a very high-level illustration of the optimal shoreside location. If and when the proposal is taken forward, concrete options would be considered by the engineers and these would be subject to a detailed feasibility study, EIA and associated traffic impact assessment, and public consultation – this would all take place before any proposal could be delivered.
Holm Community Council	Scapa Deep Water Quay: when a financial case is made for the project I would assume that the project will need to be pursued as quickly as possible and one of the first elements will be construction of the road access. As such we would like much more detailed consideration of this to be undertaken in advance of any decision to advertise the possibility of construction of a Scapa Deep water port project to potential customers. In this way construction would be able to commence almost as soon as any deal was completed to provide the port facilities.	
Holm Community Council	Holm Community council met on Wednesday evening last week. We didn't have any particular comments to make on the general aspects of the master plan. Provided that the individual investments make economic sense then going ahead with them seems sensible for the economic wellbeing of Orkney.	Noted.
Sanday Community Council	Kirkwall Pier Signage: members would like signage on buildings in Kirkwall as there is nothing telling tourists there where the North Isles ferry terminal is.	The reconfiguration of Kirkwall Pier will include a review of signage, along with buildings, layout and traffic management.
Sanday Community Council	Kettletoft Pier: the ladders are restricting pier users where the ladders are offset rather than inset and boats cannot berth properly between them.	Phase 2 will commence in early 2020 and there will be planned visits to each island community; all issues identified will be taken on board and dealt with during Phase 2.
Sanday Community Council	Kettletoft Pier: the large pier store door has been off for a while even though this has been reported.	

Consultee / Respondent	Summary of Comments	How the Comment was Taken into Account or Reason for not
Sanday Community Council	It has been noticed over the past month that visiting yachts are having problems berthing at the mooring buoy at Kettletoft.	With regard to marine leisure and the 'sailing offer' in Orkney, the initial focus within Phase 1 of the masterplan is on Kirkwall and Stromness, given that these are the primary marinas in Orkney and are both operating at capacity – all yachts visiting Orkney stay at one or other of these marinas during their trip. It is accepted that a wider strategy is required encompassing the whole of Orkney to create a network of yacht moorings, landing places and pontoons, as well as developing the services to support what is a growing sector. This strategy will be developed during Phase 2 and will build on that which is proposed in Phase 1.
Orphir Community Council	Specifically in Orphir though, it would be great to have a wee marina at Houton.	
Orphir Community Council	Initial thoughts are that this concentrates on development in the larger ports. No problem with that. However, as Marinas are mentioned I think it would have been good to see some ambition regarding marina developments in the small ports. For example small marinas in Houton, Tingwall, Birsay, Sanday, Stronsay, Shapinsay, Eday, Flotta, Hoy and others. These would spread visitors to the islands rather than concentrating them in the larger ports. This would also ease congestion, spread income around Orkney and provide some fantastic visitor experiences. Possibly something that development trusts would like to be involved with.	

6. MONITORING MEASURES

This section sets out a framework for monitoring the potential significant environmental effects of implementing the Orkney Harbours Masterplan Phase 1. The framework provided in Table 6-1 lists all aspects which will be monitored, who will be responsible for the monitoring and timescales for when this monitoring will occur.

The framework will help to identify, at an early stage, unforeseen adverse effects and to enable OICHA to undertake appropriate remedial actions.

Table 6-1 SEA monitoring framework for the Masterplan

What is being monitored?	Data source, frequency	Summary of monitoring and proposed remedial actions	Responsibility and Timescales
Air Quality	OIC reporting	Greenhouse gas emissions, dust and noise to be monitored during construction.	OIC - ongoing
NNS Presence	OICHA Marine Invasive NNS Survey	Presence and trends of marine Invasive NNS in Scapa Flow monitored and reported to Orkney Marine Environment Protection Committee.	NNS Presence
Disturbance of EPS and other important species	Traffic volumes - continuous	Shipping traffic volumes to be monitored.	OICHA - ongoing
	Cetaceans, seal & otters - Annual	Populations of cetaceans, seals and otters will continue to be monitored.	Orkney Biodiversity Records Center (OBRC), Sea Mammal Research Unit (SMRU) and Joint Nature Conservation Committee (JNCC) - ongoing
SAC and SPA site condition	SNH site condition monitoring	Status, condition, area and number of species for all European sites.	SNH – at appropriate intervals for each site feature
Carbon emissions	OIC Carbon Management Programme	Carbon dioxide emissions from tugboats and harbour craft monitored to ensure Carbon Management Programme targets are met.	OICHA – ongoing
Waste by-products	OIC Waste Plan monitoring and reporting	Quantities of waste by-products produced during construction and by vessels monitored.	OICHA – ongoing
Accidents and Incidents	OIC Accidents and Incidents monitoring and reporting	Impacts on safety of harbour users will be recorded.	Accidents and Incidents

What is being monitored?	Data source, frequency	Summary of monitoring and proposed remedial actions	Responsibility and Timescales
Soil and sediment	SEPA	Potential contamination of soils and sediments to be monitored.	SEPA – ongoing
Coastal erosion	Orkney Local Development Plan (OLDP)	Rates and areas of coastal erosion rates within the Orkney Islands.	SEPA, OIC - ongoing
Water quality	River Basement Management Planning (RBMP) / WFD water quality reporting	Water quality of coastal and transitional waters to be monitored to fulfil the WFD monitoring requirements to ensure thresholds are not exceeded. Parameters monitored include; benthic invertebrates, phytoplankton, macroalgae, physio-chemical.	SEPA - ongoing

REFERENCES

1 Fisher Advisory Ltd (2020). Orkney Harbours Masterplan Phase 1 – Consultation Report. February 2020.

2 Intertek (2019a). Orkney Islands Council – Harbour Authority. Draft Orkney Harbours Masterplan Phase 1 – Strategic Environmental Assessment - Environmental Report. Report Number: P2214_R4666_Rev2. Dated: 7th June 2019.

3 Intertek (2019b). Orkney Islands Council – Harbour Authority. Draft Orkney Harbours Masterplan Phase 1 – Habitats Regulation Appraisal Screening Assessment. Report Number: P2214_4683_Rev1_HRA. Dated: 19th July 2019.

4 Intertek (2020). Orkney Islands Council – Harbour Authority. Draft Orkney Harbours Masterplan Phase 1 – Appropriate Assessment. Report Number: P2214_RN4920_Rev1. Dated: 27th January 2020.
